

DOCUMENT RESUME

ED 023 141

08

CG 003 144

Guidance Programs and Their Impact on Students: A Search for Relationships between Aspects of Guidance and Selected Personal-Social Variables. Final Report.

Minnesota State Dept. of Education, St. Paul.

Spons Agency-Office of Education (DHEW), Washington, D.C. Bureau of Research.

Bureau No -BR-5-0195

Pub Date 20 Jun 68

Contract -OEC-5-85-035

Note-316p.

EDRS Price MF-\$1.25 HC-\$15.90

Descriptors - *Counseling Effectiveness, *Evaluation, Factor Analysis, *Guidance Programs, Research, *Student Adjustment, *Student Improvement

The major purpose was to begin the search for evidence, almost nonexistent now, of the total impact of guidance programs on the students they serve. The method was to investigate relationships (through intercorrelation) between guidance programs and personal and social variables that are commonly thought to be influenced by guidance efforts, on the assumption that students who have been exposed to varying amounts and levels of guidance should have achieved guidance objectives in varying degrees or numbers. Some 200 indices were used, in 84 schools, with 1,116 seniors plus school staff, graduates, and dropouts. Factor analysis produced a small number of less redundant scales, and regression analysis indicated the best combination of predictors for such outcomes. Relationships were generally very modest, prompting concern as to the impact of formalized guidance. Counselor personality was by far the most related to outcomes. Student and staff satisfaction as outcome was most related to guidance effort. Most other outcomes were more related to environmental factors than guidance. Guidance does help some students in some ways. Counselors should consider more active roles, help change environment to enhance healthy development, develop greater interpersonal sensitivity and skills. Counselor educators, school administrators should support and encourage such roles. (AUTHOR)

Final Report

Project No. 5-0195
Contract No. OE-5-85-035

GUIDANCE PROGRAMS AND THEIR IMPACT ON STUDENTS: A SEARCH
FOR RELATIONSHIPS BETWEEN ASPECTS OF GUIDANCE AND
SELECTED PERSONAL-SOCIAL VARIABLES

Armas W. Tamminen, Project Director
University of Minnesota, Duluth

G. Dean Miller, Assistant Director
Minnesota Department of Education, St. Paul

June 1968

The research reported herein was performed pursuant to a contract with the Office of Education, U.S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

Office of Education
Bureau of Research

ED023141

003 144

ACKNOWLEDGMENTS

The idea of a large scale evaluative study of guidance in Minnesota High Schools was conceived by G. Dean Miller, Assistant Director, and explored by him with a special committee representing high schools counselors, administrators, principals, counselor educators and research workers. It was he who persuaded the Director, A. W. Tamminen, to undertake the writing of a proposal and the direction of the research project under the auspices of the State Department of Education. The Assistant Director contributed heavily in the training of field workers, the screening, editing, and preparation of questionnaires and other materials, in supervising the preparation of the final report, and in numerous other ways. The responsibility for the actual writing of most of the report was assumed by the Director.

The authors are deeply indebted to Dr. Kenneth N. DeYoung for his help in the preparation of the proposal, his editorial reading of the final report, and his advice and help in many stages of the study, and for the development of a method for assigning Army General Classification Test score values to the many many occupational choices, real and ideal, of the students surveyed.

Very substantial and grateful acknowledgments are due a number of people without whose contributions the study would not now be completed: to Dr. James Ryan who gave assistance during the early planning stage; to Michael Toffoli, excellent research assistant and idea man; to Rodney L. Rosse for his advice and guidance in the statistical treatment, particularly the factor analysis; to Timothy Rowley, incomparable programmer whose ingenuity often rescued the analysis; to many members of the State Department of Education, especially Reynold Erickson and Jules Kerlan of the Office of Pupil Personnel Services for their advice and help, and Ronald Laliberte and his business office staff for expediting procedures to make continued progress possible; and to the field workers: Shirley Bergum, Dorothy Dosse, Ivy Fineout, Jane Haller, Myrtle Johnson, Viola Marti, Helmie R. Peterson, Frances Ramaley, Margaret Stuart and Ingrid Wells. Equally important were home office workers and typist, Judith Cincotta Fitzgerald, Loyce Besser Leona Barthel and Wilma Terwilliger.

TABLE OF CONTENTS

	<u>Page</u>
Acknowledgment.	ii
Summary	xiii
Chapter 1	
Introduction.	1
The Problem	1
Review of the Literature.	4
What Should Guidance Be? Guidance for Whom? What	
Guidance Activity Is? Need for Evaluation. What is	
Evaluation? What Should the Outcomes of Guidance Be?	
The Criterion Problem. Situational Variables.	
Evaluation Studies.	
Purposes.	13
References.	14
Chapter 2	
Method.	20
General Design.	20
Population and Sample	21
Selection of Variables and Instrumentation.	26
Data Collection Procedures.	35
Method of Analysis.	36
References.	37
Chapter 3	
Characteristics of the Schools in the Study, Their Students	
and Their Guidance Programs	39
Situational Variables	39
The Schools	39
The Students.	41
Input Variables	48
Counselors and Their Activities	48
Aspects of the Guidance Programs.	50
Student-Counselor Contacts.	53
Outcome Variables	57
By Schools.	57
By Students	57
Summary	81
References.	81
Chapter 4	
Major Relationships Between Outcome and Predictor Factors .	82

	<u>Page</u>
Factor Analysis of Situational Variables, All Schools . . .	84
Factor S-1, Large School.	86
Factor S-2, Academic Atmosphere	86
Factor S-3, Low Ability	87
Factor S-4, Culturally Advantaged Community	87
Factor S-5, Proximity to Post-High Training	88
Factor S-6, Advantaged Family	88
Factor Analysis of Input Variables, All Schools	89
Factor I-1, Low Level of Guidance Activity.	92
Factor I-2, Problem-Oriented Counseling	92
Factor I-3, Superficial Student-Counselor Contact	92
Factor I-4, Emphasis on Nonguidance Activities.	94
Factor I-5, Good Counselor Image.	94
Factor I-6, New Guidance Program with Minimal Facilities.	95
Factor I-7, Discontented Counselor, Unimproved Program.	95
Factor I-8, Well Established and Supported Guidance Program	95
Factor I-1, Low Level of Guidance Activity.	96
Factor I-2, Problem-oriented Counseling	96
Factor I-3, Superficial Student-Counselor Contact	96
Factor I-4, Emphasis on Nonguidance Activities.	96
Factor I-5, Good Counselor Image.	97
Factor I-6, New Guidance Program with Minimal Facilities.	97
Factor I-7, Discontented Counselor, Unimproved Program.	97
Factor I-8, Well Established and Supported Program.	97
Factor Analysis of Outcome Variables, All Schools	97
Factor O-1, General Satisfaction with Guidance.	98
Factor O-2, Good Holding Power.	98
Factor O-3, High General and Academic Self-Concept.	102
Factor O-4, High Incidence of Continued Education	103
Factor O-5, Lack of Helpfulness, as Recalled.	103
Factor O-6, Vocational Immaturity and Underachievement.	103
Factor O-7, Diffident Vocational Aspirations.	104
Factor O-8, Unrealistic Goal Setting.	105
O-1, General Satisfaction with Guidance	106
O-2, Good Holding Power	106
O-3, High General and Academic Self-Concept	107
O-4, High Incidence of Continued Education.	107
O-5, Lack of Helpfulness.	107
O-6, Vocational Immature Underachievement	107
O-7, Diffident Vocational Aspiration.	107
O-8, Unrealistic Goal Setting	107
Relationships Between Input and Situational Factors, All Schools	108
Relationships Between Factored Outcomes and Predictor Factors, All Schools.	108
General Satisfaction with Guidance.	112
Good Holding Power.	114
High General and Academic Self-Concept.	114
High Incidence of Continued Education	114

	<u>Page</u>
Lack of Helpfulness (as seen by Graduates)	115
Vocational Immaturity and Underachievement.	116
Diffident Vocational Aspirations.	117
Unrealistic Goal Setting.	117
A Comparison of the Relationships Between Predictor and Outcome Factors in "High Ability" and "Low Ability" Schools	118
General Satisfaction with Guidance.	119
Good Holding Power.	119
High General and Academic Self-Concept.	123
High Incidence of Continued Education	124
Lack of Helpfulness (as seen by Graduates).	124
Vocational Immaturity and Underachievement.	125
Diffident Vocational Aspirations.	125
Unrealistically High Vocational Goals	125
Relationships Between Factored Outcomes and Predictor Factors, One-Counselor Schools.	126
General Satisfaction with Guidance.	126
Good Holding Power.	126
High General and Academic Self-Concept.	128
High Incidence of Continued Education	128
Lack of Helpfulness (Graduates)	128
Vocational Immaturity and Underachievement, Diffident Vocational Goals and Unrealistic Goal Setting	130
Some Special Factors in One-Counselor Schools	131
Relationships Between Predictor Factors and Follow-Up Outcomes.	132
Satisfaction with Counselor	134
Total Kinds of Help Received.	134
Satisfaction with Present Situation	134
Percent in Training	135
Training Success.	135
Discussion and Summary.	136
References.	143
 Chapter 5	
Selected Additional Findings.	144
Correlations of Outcomes with Situational and Guidance Input Variables	144
Best Combinations of Predictor Variables for Selected Outcomes	149
Summary of First Two Sections	157
Correlations of Follow-Up Outcomes with Predictor Variables	158
Sex Differences	160
Examination of Certain Categorical Variables.	162
Field Workers' Observations and Impressions	163
Counseling.	163
Counselor Commitment.	165

	<u>Page</u>
Counselor-Teacher Relations	166
Counselor Role.	166
Unmet Counseling Needs.	167
Selected Student Remarks.	168
Students Grateful	169
More Help Needed with "Making Choices".	169
Non-College Students Need Help, Too	172
Personal Problems	172
Dual Roles Difficult to Play.	173
Post-High Guidance for Some	173
Counselor Sex Important to Some	174
Orientation to College Needs Broadening	174
Some Remarks on the School in General	175
Information About and Comments from Dropouts.	175
Reasons for Leaving - Girls	179
Reasons for Leaving - Boys.	180
Kinds of Help Offered or Given.	183
Suggestions by Dropouts for The School and Other Students	186
 Chapter 6	
Conclusions, Implications and Recommendations	191
Environmental Factors and Guidance.	192
Guidance Factors.	195
The Image of the Counselor.	197
Counselor Roles and Counselor Functions	198
Summary	201
References.	202
 ERIC Report Resume.	 204
 Appendix A Schools in Survey; Distribution of Schools in Sample by County	
 Appendix B Survey Instruments	
 Appendix C Correspondence and Other Materials used in Carrying out the Survey	
 Appendix D Key to Coding of Data	
 Appendix E Frequency Distributions for Selected Variables on which Data were Collected	

LIST OF TABLES

<u>Table</u>	<u>Page</u>
1. Stratification Levels by Size of Graduating Class, and Details for the Various Strata for the State of Minnesota and for the Sample	23
2. Variables on Which Data were Collected, and Sources of Information on Each.	30
3. Summary Statistics on Selected School Characteristics.	40
4. Summary Statistics on Selected School Characteristics, Grouped Data	40
5. Distribution of Schools on Selected Characteristics.	41
6. Summary Statistics on Selected Characteristics of Students	42
7. Number of Counselors in School	48
8. Summary Statistics on Selected Counselor Characteristics and Activities	49
9. Frequency of Various Types of Counselor Assignments.	50
10. Frequency of Levels of Overall Rating of Counselors by Field Workers.	50
11. Distribution of Salary Budget for Guidance	51
12. Distribution of Student-Counselor Ratios	51
13. Number of Years that a Formal Guidance Program has Existed in the School.	52
14. Number of Years the Program has had NDEA Approval.	52
15. Amount of Clerical Help Available per Counselor.	52
16. The Proportion of Students Who were in to see a Coun- selor and the Average Number of Times They saw Him, By School.	53

<u>Table</u>	<u>Page</u>
17. Average Length of Visits with Counselors, and Average Total Time Spent with Counselor, By Schools.	54
18. Average Depth of Reasons for Seeing Counselor, By School	55
19. Percent of Students, By School, Who Felt Able to Rate Counselor on a Scale of Counselor Response to Clients	56
20. Average Student Perception of Counselor Response to Clients, By School	56
21. Rate of Dropout for Boys, Girls, and Total Student Body Between Grades 10 and 12, By School.	57
22. Extent of Identified Legal or Emotional Difficulties Among Students, By School.	58
23. Percent of Graduates Going on to Post-High School Training, By School.	58
24. Percent of Students Who Fail and Repeat Courses, By School	59
25. Percent of the Sampled Students Who Would go to the Counselor and Percent Who Would go to <u>some</u> School Staff Member, With Various Problems, Reported By School	59
26. Percent of Sample Receiving Counseling in Depth, By Schools.	60
27. Summary Statistics on Several Outcome Variables, By School	60
28. Summary Statistics on Several Tests Used in Measuring Outcomes, By Student	62
29. Distribution of Sampled Students by High School Rank .	63
30. Extent of Participation in Extra-Curricular Activities	63
31. Perceived Sources of Help for Vocational, Personal and School Problems.	64
32. Factor Loadings of Situational Variables	85
33. Intercorrelations of Scale Scores for Situational Factors.	89

<u>Table</u>	<u>Page</u>
34. Factor Loadings of Input Variables	90
35. Intercorrelations of Scale Scores for Input Factors. .	93
36. Factor Loadings of Outcome Variables	99
37. Intercorrelations of Scale Scores for Outcome Factors.	107
38. Correlations of Situational Factors with Input Factors	109
39. Correlations of Factored Outcomes with Predictor Fac- tors, All Schools.	110
40. Best Combination of Predictor Factors for Each Outcome Factor (all Schools)	113
41. Correlations of Outcome Factors with Predictor Factors, "Low Ability" and "High Ability" Schools	120
42. Best Combination of Predictor Factors for Each Outcome Factor in High Ability and Low Ability Schools . . .	121
43. Correlations of Outcome Factors with Predictor Factors, Single-Counselor Schools	127
44. Best Combinations of Predictor Factors for Each Outcome Factor in One-Counselor Schools.	129
45. Correlation of Five Follow-up Outcomes with Predictor Factors, All Schools	133
45,A. Best Combination of Predictor Factors for Each Follow- up Outcome	133
46. Intercorrelations of Five Follow-up Outcomes	135
47. Correlations Between Outcome Variables and Situational Variables, 84 Schools.	145
48. Correlations Between Outcome Variables and Input Variables, 84 Schools.	146
49. Best Combination of Predictor Variables for 31 Outcomes (all 84 Schools)	150
50. Correlations of Four Follow-up Outcome Variables with Predictors	159

<u>Table</u>	<u>Page</u>
51. Variables in Which the Sexes Differ in Average Score .	161
52. Reasons Dropouts Gave for Leaving School	176
53. Who Tried to Help You Stay in School	177
54. Kind of Help Offered or Given Dropouts	177
55. Suggestions by Dropouts for the School and other Students	178

LIST OF FIGURES

<u>Figure</u>	<u>Page</u>
1. Comparison of Sample and Population by Senior Class Size	24
2. Wage-earner's Occupation	42
3. Father's Education	43
4. Mother's Education	44
5. Income Level of Family	45
6. Number of Books in Home.	45
7. Parent Expectation	46
8. Friends Plans.	46
9. Percentage of Each Group (Dropout, 1965 Graduate and 1966 Graduate Follow-up) Receiving Each Kind of Help From Counselor	67
10. Percentage of Each Group (Dropout, 1965 Graduate and 1966 Graduate Follow-up) Receiving Each Type of Help from Someone in School	69
11. Help in Getting to Know School	70
12. Help in Changing Subjects or Classes	70
13. Help in Choosing which Courses to Take	71
14. Planning High School Courses to Fit Future Plans	71
15. Information About My Test Scores	72
16. Help in Learning How to Study or Improve Grades.	72
17. Help in Getting My Teachers to Understand Me Better.	73

<u>Figure</u>	<u>Page</u>
18. Help When I Was in Trouble in School	73
19. Help in Better Understanding My Abilities, Interests, Aptitudes, etc..	74
20. Help in Better Understanding Myself.	74
21. Help in Getting My Parents to Understand Me Better . .	75
22. Help in Trying to Decide on a Career in Line with My Aptitudes.	75
23. Information About Trade or Vocational School	76
24. Information About Colleges	77
25. Information About Military Service	77
26. Information About Different Occupations and Careers. .	78
27. Help in Getting Financial Aid Regarding Schooling. . .	78
28. Help in Finding Part Time or Summer Work	79
29. Help in Finding Work (Upon or After Graduation). . . .	79
30. Help in Deciding on a College or Vocational School to Fit Needs.	80
31. Other Kinds of Help.	80

SUMMARY

There has been a very rapid expansion of guidance programs in American secondary schools, especially within the last ten years, but very little evidence has been sought of the total impact of these programs on the students whom they serve. It was the purpose of this study to begin the search for such evidence. The search took the form of an investigation of relationships between guidance programs in various secondary school settings, on the one hand, and personal and social variables which are thought to be influenced by guidance efforts, on the other.

Effects of guidance were not directly measured, but rather the strength of relationships between guidance activities and presumed outcomes of guidance. The basic hypothesis examined was that students who have been exposed to varying amounts and levels of guidance activity will have achieved guidance objectives in varying degrees or numbers. No attempt was made to assess the impact of counseling or any other single guidance function on specific students who have received the presumed benefits of that single activity; instead, a random sample of senior students was selected to represent the impact of the guidance program on the total student body.

Using approximately 200 measures or indices, data were collected relating to guidance efforts, to situational variables which might have some bearing on guidance outcomes, and to presumed outcomes of guidance. Data were gathered from a random sample of 84 schools stratified by size, from 1,116 seniors and 504 teachers randomly selected in these schools, from all principals and counselors, and from random samples of graduates and dropouts. The 1,116 seniors were followed up one year later. Tests were taken by all seniors, and information and opinion questionnaires filled out by seniors and school staff. Additional information was obtained from State Department of Education files, from the Statewide Testing Program, and from the school itself. All field data were collected by teams each consisting of two trained field workers. Data from graduates and dropouts, and from the seniors one year after graduation, were collected by mail questionnaires, as was information on post-high school education and training success from all training institutions which the graduates (and later the seniors) reported attending.

All of the indices on which information was gathered were placed into one of three categories entitled "input variables,"

"situational variables," and "outcome variables," and each category was separately factor-analyzed, in order to reduce the large number of rather crude indices to a considerably smaller number of less redundant scales with relatively high internal consistency. By this means, a number of scales were developed and given the following titles:

- A. Six "situational" scales--large size; academic atmosphere; culturally advantaged community; proximity to post-high school training; and advantaged family;
- B. Eight "input" scales--low level of guidance activity; problem-centered counseling; superficial student-counselor contacts; emphasis on nonguidance duties; good counselor image; new program with minimal facilities; discontented counselor with unimproved program; well-established and supported program;
- C. Eight "outcome" scales--general satisfaction with guidance; good holding power; high general and academic self-concept; high incidence of continued education; lack of helpfulness of guidance, as recalled; vocational immaturity and underachievement; diffident vocational aspirations; unrealistic goal setting.

Intercorrelations among these scales (as well as among the original indices) were examined for evidence of the extent to which differences in presumed outcomes were related to differences in presumed outcomes were related to differences in guidance programs and the settings in which they are found. By means of a stepwise multiple regression technique, the best combination of four to six predictor variables was found for each of the outcomes. Intercorrelations and multiple regression findings were also reported for one-counselor schools, for high ability and low ability schools, and for selected data from the follow-up study one year later.

The major findings were as follows:

1. The magnitude of the relationships is generally rather small, verifying the expectation that differences in the rather complex personal-social variables entitled "outcomes" likely result from many factors, no one of which is dominant.
2. The best-established and endowed guidance programs with high levels of activity and contact with the student body tend to be found in schools where the students have the highest ability and come from advantaged homes in advantaged communities, and where school climate most encourages scholastic excellence.

3. In schools where the average ability is low and the climate anti-academic, counselors tend to spend their time with problem students and see little of the student body as a whole.

4. While situational factors influence not only outcomes but guidance efforts as well, as indicated above, two guidance factors seem relatively independent of economic and other environmental factors: "good counselor image" and "superficiality of student-counselor contacts."

5. If there is one guidance "input" which can with confidence be said to have effects, it is the personality of the counselor as perceived by students and observers (here labeled "counselor image.") The aspects of personality referred to are acceptance, respect for and interest in students and staff, openness, warmth, reaching out to students.

6. The counselor variables that are most related to outcomes are, in addition to the "counselor image," the number of professional organizations to which the counselor belongs and the ways in which he allots his time among his functions. The guidance program variables that relate most to outcomes are student-counselor ratio, longevity of the program, and the budget for guidance.

7. The amount of satisfaction with the guidance program on the part of administrators, teachers, and students is largely a function of the amount of input into and support of the guidance program. This relationship is strongest in low-ability schools.

8. Most of the outcomes measured, including holding power, incidence of continuing education, self-concept, vocational maturity, achievement related to ability, and realism of vocational aspirations appear to be only very slightly (if at all) related to guidance efforts. Personal, economic, and other "situational" factors appear to have more bearing on these outcomes.

9. A year after graduation, average training success, by school, is related to average satisfaction with one's life situation, but neither is related to guidance efforts.

The listing above provides only a few of the major findings; the reader is referred to the body of the report for further details. Some general conclusions and recommendations follow.

1. The always modest, sometimes inconsistent, and often negligible relationships found between guidance programs and expected results prompt a serious concern about the amount of impact that formalized guidance efforts have on students. It is evident, however, that students continue to have problems in the school

setting, and there can be no doubt that some guidance programs help some students; the implication is that guidance programs should be improved, not removed.

2. The very evident relationship between certain environmental factors, such as academic atmosphere, and certain desired student behaviors raises a serious question as to the relative value of spending most counselor time in working with students who are having difficulty, as compared with spending more time in helping to develop a better environment for the healthy growth of all students.

3. The very small proportion of students who indicated willingness to see the counselor with personal problems, along with the large number who indicated that they did not really know him as a person suggests the need for counselors to get out and mingle with students in various settings within the school in which they can be perceived as providing a helping, trustworthy relationship.

4. The evident impact of warm, accepting involved counselor personality re-emphasizes the importance of those aspects of counselor preparation (and in-service training) which encourage the development of these characteristics--supervised practice with individuals and groups of students and with parents and teachers, and sensitivity training.

5. The need for broader and deeper counselor roles carries clear implications for counselor education and for administrative support and reinforcement of such roles.

Chapter 1

INTRODUCTION

The Problem

A significant development in American public education in the twentieth century has been a redefinition of the role and functions of the elementary and secondary school so as to accept responsibility for many aspects of the total growth and development of children not previously considered to be concerns of the school. The evidence of this changing point of view has been an expanding array of services to students, many of which are classified as guidance services or incorporated into what are called guidance programs.

Not only have these guidance programs spread rapidly through American secondary schools, especially in recent years, but they have enlisted much financial support at local, state, and national levels. The end of World War II marked the beginning of a rapid acceleration in the growth and cost of guidance activities, and additional spurts resulted from the post-Sputnik panic followed by the passage of the National Defense Education Act, and from the passage of the various so-called "war on poverty" bills, such as the Elementary and Secondary Education Act of 1965.¹ Precise figures on the amount of money spent annually at all levels in direct and indirect support of guidance activities would be impossible to obtain. However, some idea of the size of the investment is provided by an Office of Education report indicating that in 1962-3 alone, a total of \$145,900,745 was spent on state-approved Title V-A guidance programs (68 :pp. 12-13). The report also indicates that the proportion of high school students attending schools with no guidance programs dropped from 50% in 1958-9 to 10% in 1962-3, (p. 20-21) some evidence of the mushrooming of guidance programs in recent years.

School guidance programs, whatever functions are included in them, are generally initiated in the belief that certain needs of society and of the individual are more likely to be met if guidance services are provided. It is generally considered essential to the

¹The post-Sputnik period produced a shift in the language of educators, with more emphasis on narrowly defined scholastic attainment and talent, but guidance activity, in the name of national defense, increased rather than diminishing; later the emphasis on vocational training and equality of opportunity once again broadened the scope of responsibility of the schools and provided further support for guidance activities.

continued health and progress of our rapidly changing society to have as many as possible of our citizens receive education and training commensurate with their potential abilities or talents, enter appropriate useful occupations, and achieve reasonable success in their careers. We also value the notion that each individual has the right and should have the opportunity to follow his own interests, utilize his skills and talents, realize his unique developmental possibilities, and to live a full and satisfying life as he perceives such a life to be. Guidance programs exist in the hope that they can and do contribute materially to the attainment of such social and individual goals as these.

It is one thing to state the goals of school guidance programs in such general terms; it is quite another to specify just how these goals are to be attained, what prevents or interferes with their attainment, and how guidance, as differentiated from other school functions, can best contribute toward their attainment. It is not surprising, therefore, that there is a lack of agreement about aspects of guidance that might be presumed to be basic to the practice of the art, such as how guidance is to be defined, what activities or services are to be subsumed under that heading, and how guidance is related to counseling, teaching, and pupil personnel services. Nor should it be surprising, considering the lack of agreement on these fundamentals, to find a paucity of research on the actual accomplishments of guidance programs.

Faith, hope, and charity have characterized the American attitude toward guidance programs--faith in their effectiveness, hope that they can meet important if not always clearly specified needs, and charity in not demanding more evaluative evidence that the faith and hope are justified. However, as Hill (23:p. 255) says, "--evaluation of guidance services is inevitable. It will be done whether or not guidance workers do it. It can be based on conjecture, opinion, hearsay; or it can be based on systematic, professional investigation." There are indications that at least one major source of funds for educational programs, the United States Congress, may soon begin to require evidence of what is actually being accomplished with the funds it provides for guidance programs, as it already has done in other areas, as for example in the Elementary and Secondary Education Act of 1965.¹

There is, in the observation that evaluative research is needed, no implied criticism of the pioneers in the guidance movement. These men of vision were on the "leading edge," sensing the changing needs and the resulting problems and suggesting creative solutions. As our society grew more complex and urban, as old occupations and old values began to be replaced by new ones, as

¹Title I, Section 205 (a) (5)

family ties loosened and family advice and tradition became less useful and realistic, it appeared evident that young people needed additional help, and guidance programs were developed to provide that help. Leaders in vocational education were among the earliest to support such programs. Now that the guidance movement has been in existence for nearly half a century and guidance programs are to be found in most secondary schools, however, it is reasonable to expect that some search be made for evidence that guidance programs are in fact accomplishing their purposes.

Neither is the implication intended that nothing is known about the effectiveness of various guidance functions in particular settings. Some types of functions provide a kind of immediate evaluative feedback, as for example the placement of students in part-time jobs. Other functions, and most particularly counseling, have been studied intensively both as to the process involved and as to outcome. The typical evaluative study of counseling compares students who have spent a number of hours with a counselor in a special kind of personal relationship to students who have not had this experience. Counseling, however, while important, is but one of the functions of the total guidance program. A few examples of the many other activities included in guidance programs are: orienting students to school and to post-school situations, preparing and conducting occupation units, testing, having parent consultations, collecting occupational information, making referrals, placements, and followup studies.

While counseling reaches a relatively small number of students rather intensively, most of the other aspects of the guidance program attempt to influence the entire student body in a much less intensive fashion. It is on the impact of this total guidance program that evaluative research is needed and is almost entirely lacking.

Whatever other reasons there may be for the lack of evaluative research on total guidance programs, the most obvious and formidable obstacle has been the difficulty of the task. Even a moment's consideration of the awesome problems facing the would-be evaluator should make it abundantly clear why most evaluation has been done on limited aspects of the total program or has been confined to status and process studies rather than outcome studies. Among the many obstacles faced in trying to evaluate guidance programs are the following:

1. in order to determine whether the goals of guidance programs have been reached, measurable goals must be specified, but up to now there has not been full agreement as to what the specific goals or objectives ought to be;
2. even if agreement were reached on goals, there are no clearcut and generally agreed-upon valid criteria by which success in attaining these goals is to be measured;

3. the goals of the guidance program cannot be at odds with the goals of the rest of the school program, but rather are intended to maximize the probability that the basic educational outcomes will occur; how then can the effects of guidance activities be completely separated from other educational effects?

4. the goals of guidance, since they support the goals of the total educational endeavor, will vary somewhat from school to school as well as from student to student; thus common or "nomothetic" criteria will not be fully adequate to measure outcomes for individual school systems and individual students;

5. the activities carried on in the name of guidance, even when titled the same way, differ from school to school, making comparisons difficult. Time spent in counseling, in parent contacts, in followups, may be spent in very different ways from school to school;

6. guidance efforts are often pitted against extremely powerful counter-influences in the lives of students, and in relating guidance efforts to results there is always the danger of misinterpretation since more effort may be expended on the very students for whom success is less likely because of stronger counter-influences;

7. the hoped-for outcomes of guidance are generally long-term outcomes, such as success and satisfaction in reaching one's life goals; but if students are followed long enough to measure these outcomes, it is obvious that differential factors unrelated to guidance efforts but seriously affecting the results will create uncontrollable problems;

8. the very global nature of guidance creates further problems: sufficiently dramatic changes to be measurable with the relatively crude instruments now available may occur in the intensive personal relationship occurring in counseling, but the impact of the broad guidance program on the total student population may be of such small magnitude as require more sensitive measuring instruments than are now available for the detection of changes.

Such difficulties as those enumerated present a rocky coast indeed for the landing of the exploratory evaluator, and the search for evidence of the results of guidance efforts has been understandably limited. Nevertheless, the need for research is unquestioned, and preliminary attempts to measure the success of the broad range of guidance activities must be made. The success of future efforts using more sophisticated designs and measuring instruments may depend upon more modest, exploratory beginnings such as the present study.

Review of Literature

A. What Should Guidance Be?

It may seem that the answer to that question should be self-evident

after a half-century of guidance programs, but this is far from true. Hill opens his recent book on the improvement of guidance with the statement that guidance has not yet "--achieved among its practitioners a consensus as to meaning and purpose." (23:1) For many, like Hill (pp. 7-12) guidance is the individualizing and personalizing of education; however, Hutson (26:18) for one disagrees and states specifically that guidance is not individualizing of education. The special edition of the Harvard Educational Review for Fall, 1962, provides striking evidence of differences in views among influential writers in the field.¹ In that issue, Michael and Meyerson (35) identify guidance as the shaping or "engineering" of behavior. Without direct reference to this article, Shoben (63) points out that what behavior engineers may see as self-evident directions in which to shape children's behavior are often the values of the most dominant segment of the white middle class. Shoben argues that, rather than re-enforcing these values and reducing variability, guidance workers should deliberately act as catalysts or change agents in the reconstruction of the school culture. The other contributors to the issue propose still other views.

Some writers make no real distinction between guidance and counseling. Rothney's book about counseled and noncounseled students is entitled Guidance Practices and Results (56); Patterson, in a review of research on guidance actually discusses counseling (47). Most writers, however, explicitly distinguish counseling as one of many guidance functions (usually the major one): Mathewson's definition is fairly typical and implies a broad program: "Guidance is a systematic professional process of aiding and preparing individuals to make their choices, plans, and adjustments to undertake effective self-direction and to meet problems of personal living related to education.." (32:206) Descriptive statements by Miller (38) and the articles in Saltzman and Peters (59) represent some of the more recent of many attempts to distinguish "guidance" from teaching, counseling, and pupil personnel services, and to distinguish various guidance functions. The need for repeated clarifying statements indicates that the abstraction "guidance" continues to have many connotations.²

B. Guidance for Whom?

It is doubtful that anyone who has expressed opinions on the subject would specifically exclude any segment of students from the

¹G. W. Allport; L. Meyerson and J. Michael; Adrian Van Kaam; Carl Rogers; E. J. Shoben, Jr.; C. G. Wrenn; D. K. Whitla; R. C. Hummel; D. V. Tiedeman & F. L. Field.

²Changing conceptualizations of vocational guidance add to the problems of definition. The term itself clearly implies a subset under guidance in general. However, in reading Wannamaker's review of recent statements about various aspects of vocational guidance, (71) one is left with the impression that it may soon be more inclusive than is "guidance," as now conceived by many.

"benefits of guidance," but many would, by implication, restrict guidance services. Those who emphasize therapeutic counseling as the essence of guidance (55), for example, clearly imply a limited clientele, if only through self-selection. Perhaps at the other extreme, some, like Peters (49:168) de-emphasize services for those with serious problems and emphasize responsibility "for the many normal boys and girls." (*italics mine*). However, most writers on guidance services either state explicitly that "guidance services should be for all children" (61:93) or at least clearly imply this in describing the services. (23, 26, 38)

C. What Guidance Actually Is. (Inputs)

For purposes of this study, the question as to what guidance ought to consist of, be it a crucial issue or a semantic quibble, can be bypassed. A working definition of guidance programs as they exist is provided by a list of those operations that are actually being carried out in the name of guidance. Such a list also points directly at the functions that must be measured, in the process of evaluation, as guidance inputs. Lists of this kind can be obtained not only from books and articles on guidance (c.f. 18, 23, 26, 38, 48, 50, 73), but from publications in the various states relating to guidance programs in the schools of that state: as for example Colorado (10); Idaho (27); Iowa (25); Louisiana (30); Minnesota (19); Mississippi (39); Missouri (40); New York (8, 69); Ohio (48); Oklahoma (46); and Virginia (42). The overlap on these lists is very great; they will not be repeated here. To the extent that it was possible to locate or devise ways to measure these listed provisions for guidance services, they are to be found in Chapter 2, Table 2, Part A, classified as "Inputs."

D. Need for Evaluation

There is probably no aspect of guidance on which there is more universal agreement than on the lack of and need for evaluative research. A few examples will suffice to make the point. Shoben (63) notes that, at the very time guidance is expanding fastest, "--it can show little in the way of solid research to demonstrate its merits or its achievements." Shertzer and Stone, in 1965, commented that "It is enigmatic that time, money, and talent can be invested in program development while the effect and impact of this investment is simultaneously neglected." (62:217) Dugan, quoted by Liggitt (29:107) says "Thus far, the organization of guidance programs has been dependent upon an 'educated' guess; it will probably remain so until counselors and guidance workers examine the quality of their products in light of goals and procedures of the programs." And Wellman and Twiford summarize the general feeling by stating, "--the defense of many elements of the guidance program is based on logical reasoning rather than on scientific evidence, and it can only be concluded that at present

their value is hypothetical. The continued acceptance and support of the guidance function in education may very well depend upon evidence that it can accomplish the purposes and produce the results claimed." (73:4) Hill (23:229-30) maintains that although good research has been done, we especially need and lack "total impact" research--evaluation of the total program.

E. What is Evaluation?

Roeber, Smith and Erickson note that there is lack of agreement on this point. "The concept of evaluating guidance services is somewhat ambiguous and confused in the guidance literature. Does it refer to the evaluation of the services themselves in terms of the type and quality of services existing in any school? Or does it refer to the effect of the guidance services upon the lives of boys and girls?" (54:261) Barry and Wolf (3:154) suggest that evaluation consists of defining the objectives of the program, establishing criteria by which to judge attainment of these objectives, designing instruments to measure such attainment, collecting information, and judging achievement. In "total impact" evaluation, it would seem necessary, in addition, to control or at least measure the various kinds of guidance input, and to specify the environmental situation in which the guidance activities were conducted.

F. What Should the Outcomes of Guidance Be?

As might be expected from the lack of agreement as to the most fundamental purposes of guidance, the many listings of goals or desired outcomes of guidance (e.g., 11, 14, 18, 23, 26, 37, 44, 50, 54, 56, 57, 64, 75, 76) tend to be something of a hodgepodge. Among these lists (and frequently within them) can be found different kinds of goals--from remedial to developmental; from immediate to very long range; from subjective to objective; from intermediate or "process" objectives (which lead to other objectives) to ultimate goals. The pairs listed represent extremes on the several continua rather than discrete choices among objectives. For example, an objective such as success in college is but a step toward longer-range goals (which in turn may be unrealistic in terms of some other desired outcome such as self-fulfillment.)¹

Another frequently mentioned outcome, satisfaction with guidance, may be immediate or long-range, is subjective, and according

¹It could be argued that it is nonsense to talk of "ultimate goals" in evaluating high school guidance, not only because of the myriads of intervening events but also because the whole notion may be illusory. Man seems to be a goal-seeking creature who, when he reaches a goal, proceeds to set a new one. Is it not enough for us to help the student learn to set goals and how to cope with both reaching and failing to reach them?

to some writers is not a relevant outcome (47). To be sure, the clients of charlatans also express satisfaction, but it does not follow that recipients of guidance have no relevant knowledge of what happens or of how helpful that guidance was. Furthermore, it can be both a meaningful and a reliable index of differences in guidance when, in comparing two schools, it is found that in one the students all express satisfaction with guidance and see the counselor as a person to whom they can go with their problems, while in the other the students generally express dissatisfaction and do not see their counselor as helpful when they have problems.

Assuming the possibility of agreeing on fundamental purposes of guidance, there will be great value in the development of taxonomies of outcomes, as Wellman proposes, (72) for use in evaluation. Even a well-developed taxonomy will not, however, eliminate imperfections, nor will it prevent criticisms of outcomes used in evaluation. In the meantime, the present study used all types of outcomes found in the literature if criterion measures deemed appropriate could be located or devised for them. It is left to the reader to judge their relative value as outcomes of guidance.

G. The Criterion Problem.

"The quality of all future evaluative studies depends upon the development of adequate criteria." (54:270) One frequently reads comments of this nature, stressing the importance and the difficulty of developing adequate criteria. Often such comments refer to and confuse two separate problems--the problem of outcomes (what we expect to happen to students) and the problem of criteria (by what measures shall we determine whether it has happened?). For example, Wrenn and Dugan (76:60) lists as "valid criteria" such things as improved social adjustment and development of democratic attitudes. And in a paper developing criteria for a proposed national study of guidance, three steps are given as necessary: identifying objectives, translating them into behavioral terms, and identifying instruments for their measurement. (43:1) The second of these is listed as the criterion.¹ It would seem that the confusion could be avoided if, as Mager (31) has argued, objectives are defined in behavioral terms and the measures or tests used to sample that behavior are called criteria. If objectives were so stated, the criterion problem would be half solved, but the difficult task of developing sensitive, valid measures of the specified behavior would remain.

¹An example lists the objective as "For the student to become competent in skills that are needed for achievement consistent with his ability;" and the criterion as "demonstrated mastery of skills needed for achievement consistent with his measured ability." (p. 15). There is no self-evident measure implied here; the "criterion" needs another criterion by which to demonstrate mastery.

In this study, some outcomes are listed specifically in terms of their criteria while for others the criterion measures are described elsewhere. The outcomes are listed in Chapter 2, Table 2, Part C.

H. Situational Variables.

A research model that has been suggested for a national study of guidance specifies four categories of variables to be included. (72:11) One of these, "guidance and counseling or process variables" includes what are called "inputs" in this study. Another, "criterion variables based on the stated objectives" compares with "outcome" variables in the present study. However, two categories are used in the model for what have been called "situational variables" here; these are "situational variables to describe the social, cultural, and institutional setting" and "student variables capable of differentiating clients. The latter presumably refers to personal characteristics such as measured ability. Both of these are non-guidance influences that may affect the outcomes and are therefore classed together in the present study. (See Chapter 2, Table 2, Part B).

I. Evaluative Studies.

The hundreds of studies that might be construed as evaluative of some aspect of guidance (especially counseling) have been frequently and adequately reviewed; another comprehensive review seems unnecessary at this time. Four such reviews appear in the April issues of the Review of Educational Research every third year from 1957 (11, 47, 57, 66). In 1957 the comment was that "most of the attempts to evaluate apply only to parts of the total program." Similar comments appear each time: in 1966 the paucity of total program research is still being lamented. Metzler (34) makes the same comment in 1964 and calls for a multifactorial approach. Three other recent reviews, by Mehrens (33), Baker (1), and Proff (51: on counseling) are unpublished, but cover 350-400 references. Many others deal primarily with psychotherapy. The great majority of these studies were conducted in colleges, hospitals, and elsewhere rather than in high schools. At least half of them deal with one aspect of guidance--counseling. Perhaps a third of the studies are attempts to learn more about tests and other measuring instruments, or special techniques of counseling. Only now and then can a study be found attempting to evaluate an aspect of high school guidance services other than counseling, and almost none on total program.

Illustrative of research on instruments are two studies on Bills' Index of Adjustment and Values. Bills (6) found that students in a health course taught by student-centered methods increased significantly in self-concept and acceptance of self, as compared

to students taught traditionally. He concludes that since such changes had earlier been demonstrated in therapy, student-centered teaching has therapeutic value. Strong (65) factor analyzed several measures of self-concept including Bills' measure and the Butler-Haigh Q-Sort. Only "perceived self" was measured in common by all; Bills self-acceptance also loaded on "perceived self" to some extent. "Ideal self" turned out to be complex with scattered loadings.¹

The smattering of studies on guidance functions other than counseling cover a wide variety of topics, and suggest that, at least in limited and tentative ways, many guidance functions have demonstrated some value. The Montana Department of Public Instruction (41) sent a questionnaire to the 1962 college freshmen in Montana in an attempt to obtain opinions about their high school guidance services. The majority felt they had helped. Cramer and Herr (12) sent a questionnaire to a random sample of entering college freshmen, asking about their high school guidance; 82% responded. Students from larger schools (over 300 students) were more satisfied with high school guidance, as were those most willing to see their counselors with problems. Jessell and Rothney (28) asked 95 sets of parents to report on action taken as a result of parent-counselor conferences, comparing answers to student reports. They concluded that specific suggestions by counselors who knew students stimulated action. De Gregorio (13) reported on the results of a job-placement program for high school seniors, indicating an increased demand for guidance services and a more vocationally knowledgeable student body.

Most control group studies have dealt specifically with counseling, generally with results that indicate no gain or modest gain by counseled groups. Richardson (53) investigated grades of counseled and non-counseled students for 5 terms before and after counseling, finding no differences. Hill and Grieneeks (24) also found, in comparing counseled and noncounseled under and "over" achievers that any differences could be attributed to regression effects. On the other hand, Brown (7), Ofman (45) and others have found improvements in grades as a result of individual and group counseling (as compared with controls). Similarly contradictory results can be found when other criteria are used.²

¹This and other reports, plus Bills' personal (telephone) communication that self-acceptance had proved more valuable a measure than self-ideal discrepancy, led to the selection of perceived self and self-acceptance as the two measures used.

²One of the more discouraging reports, by Volsky, et. al., (70) presents an unusually carefully conceived study of counseling effects, in which 33 hypotheses were tested and the only significant finding favored the noncounseled group. The authors question whether, with the broad range of client problems and counseling activities, meaningful statements about counseling in general can be provided by research in specific situations. (p. 173) This question applies with even more cogency to "guidance in general."

Control groups have on occasion been used with other guidance functions as well. Scarborough and Wright (60) did not find any differences in grades between groups exposed and not exposed to a pre-college educational guidance clinic experience. Dyson (15) studied the effect of ability grouping on self-acceptance and academic self-concept. He found no differences from heterogeneous grouping, but did find that success in school increased scores on academic self-concept in both groups. Westbrook (74) found that students given test results made significant gains in self-knowledge but no changes in vocational aspiration levels, as compared with students not given this information. Barclay (2) assessed attitudes of elementary school students resulting from three treatments--planned intervention, selective reinforcement, and change of teacher. He found that treated groups developed more favorable attitudes. The study was conducted by school psychology interns rather than counselors but suggests possible new dimensions in guidance.

A number of longitudinal studies extending two or more years have been reported but again very few with high school students. Campbell (9) found that 25 years after college counseling, Minnesota graduates had slightly more income, patents, publications, and "contributions to society" than noncounseled students. Gonyea (20) found that counseled college students did not improve their vocational objectives (as seen some years later) any more than, or as much as, noncounseled students. Goodstein (21) also found no differences between counseled and not counseled under-achieving college freshmen five years later, with respect to grades, graduation, and dismissal from college. Similar contradictory results are to be found in other studies. In one of the few follow-up studies with high school students, Benson and Blocher (4) report that low achievers given group counseling with role playing achieved better, graduated in larger proportion, and expressed more feelings of adequacy than matched noncounseled students. A number of follow-up studies, while not directly evaluating guidance, are of interest to counselors, such as Super's Career Pattern Study (67) in which the vocational development of ninth grade boys will be followed through 20 years. Another example is Berdie's and Hood's comparison of the post-high school plans of two groups of seniors 11 years apart. (5)

Two long-term studies that deserve special mention are these of Rothney and Roens (58) and Rothney (56). The first involved guidance by high school faculty members with special instruction or training, and resulted in positive findings with respect to curriculum change and subject failure in high school, and employment and satisfaction with employment after graduation. The second was actually a comparison of counseled and noncounseled high school students, and again the findings were positive. The counseled group not only made slightly better academic records but made more progress in employment, carried out vocational choices more consistently, were more likely to go into and complete higher education, participated in more self-improvement activities,

indicated more realism about their strengths and weaknesses, expressed more satisfaction with high school, post-high education, and counseling experiences. Differences were slight but significant or near-significant.

Of several longterm studies, Project Talent is by far the largest and most comprehensive. The basic goal is the identification of talent, and of combinations of aptitudes, abilities, interests, educational experiences that constitute the best basis for various careers. Instruments have been created and validation studies made. Guidance services are among the various aspects of high school influence on which data have been collected. When these long-range results are assessed, they may prove invaluable in the guidance of high school students, as well as in curricular planning. At present, however, the only information available relating guidance to other data is a report that the amount of counseling received is associated with taking more courses in science, mathematics, and foreign languages, and in plans to attend college. (16, 17, 18, 52)

In a study somewhat like the present one, Helling sought evidence of relationships between "exposure to guidance program" and certain other variables. (22) Exposure to guidance was defined in terms of student-counselor ratio, length of time a low ratio had been in effect, and length of time the program was NDEA approved. Helling investigated the relationship of these variables to the following: grouping on the basis of interest; opportunities for acceleration; congruence between scholastic aptitude and pre-college courses; congruence between linguistic aptitude and linguistic courses; and congruence of ability and high school rank. Low ratio and more years of low ratio were related to the congruence measures generally.

In summary, there have been a large number of evaluative studies of counseling with results ranging from negative to moderately positive, but only a few studies of other guidance functions, and almost none of the impact of the total guidance program. In discussing the need for further research, Miller says: "Why not begin by defining the guidance services which we seek to evaluate, and then investigate whether or not these services are significantly associated with any differences in the behavior of those receiving the services? If significant differences are found, then we can worry about whether the changes are in a 'good' or 'bad' direction, and persons of differing philosophical persuasions are free to make their own interpretations of the differences." (36:433) It is in this spirit that the present investigation was undertaken.

Purposes

By 1960 three-fourths of American secondary schools, as sampled by Project Talent (18:p. 3-38) had some kind of guidance programs, and 60% of the remainder were planning to start such programs soon. As the amount of effort and money expended for guidance grows, basic questions concerning the value and success of these programs become more important. Are the objectives that guidance programs hope to achieve actually attained in greater measure when more money and effort are expended for guidance? Are certain kinds of desired outcomes reached in greater number or quality where certain kinds of guidance activities are especially emphasized? It was the purpose of this study to begin the search for answers to such questions as these.

Minnesota has been known as a leader in the guidance movement; more effort has been expended over a longer time in Minnesota than in many other states; mandatory training to the M.A. level including a practicum experience is required for state certification and for receipt of some additional state aids by the school employing the counselor. A comprehensive study of guidance programs in Minnesota was believed to be of value in providing information on the relationships between guidance efforts and outcomes, in serving as a takeoff point for other state and national studies, and in providing suggestions for policy determination.

The study attempted to do four things:

- a. to identify and measure characteristics and activities of guidance programs as they exist in Minnesota high schools;
- b. to identify and measure personal-social characteristics of students and any other variables that are considered to be outcomes of guidance;
- c. to identify and measure variables within the total environmental situation which are not directly related to guidance efforts but which may affect the goals;
- d. to study relationships among these sets of variables for the purpose of providing presumptive evidence of results or lack of results of the guidance programs.

Since no before-after measurements were made, no actual changes in student behavior were observed that could be attributed to guidance programs. Rather, the basic hypothesis was that students who have been differentially exposed to various kinds and amounts of guidance effort will have attained various guidance objectives in differential amounts or numbers. In situations where controlled experimental studies are not feasible, it has been demonstrated that evidence gathered in descriptive studies of the nature of the present one may eventually prove convincing enough to provide the basis for decisions.¹

¹An example of a decision based on such evidence is the recommendations of the Surgeon-general's office regarding the advisability of giving up cigarette smoking because of its observed relationship with incidence of lung cancer.

It was hoped that the findings of this study, with respect to relationships or lack of relationships between guidance functions and hoped for outcomes would:

a. provide a better basis than now exists for policy decisions related to guidance programs;

b. provide a better understanding of the role of guidance in assisting students to make more effective use of their educational experiences;

c. provide a better understanding of the impact of situational factors on guidance outcomes.

d. suggest directions in which more specific evaluative research in guidance might take in the future, including the development of more sensitive instruments of measurement;

e. serve as a model or basis for designing both more specific studies of limited aspects of guidance programs and larger-scale evaluative studies of guidance at regional or national levels.

REFERENCES

1. Baker, Lyle. Review of Literature on Guidance Evaluation, 1963-1968. Minnesota State Department of Education. 1968. Mimeographed.
2. Barclay, J. R. "Effecting Behavior Change in the Elementary Classroom: An Exploratory Study," Journal of Consulting Psychology. 14, 1967. pp. 240-247.
3. Barry, Ruth; and Wolf, Beverly. Modern Issues in Guidance Personnel Work. New York: Columbia University Press. 1957.
4. Benson, R. L.; and Blocher, D. H. "Evaluation of Developmental Counseling with Groups of Low Achievers in a High School Setting," The School Counselor. 14, 1967. pp. 215-220.
5. Berdie, R. F.; and Hood, A. B. Decisions For Tomorrow. Minneapolis: University of Minnesota Press. 1965.
6. Bills, R. "Personality Changes During Student-Centered Teaching," Journal of Educational Research. 50, 1956. pp. 121-126.
7. Brown, W. F. "Student-to-Student Counseling for Academic Adjustment," The Personnel and Guidance Journal. 43, 1965. pp. 811-816.
8. Burns, L. "Guidance Services in Central Schools of New York State," Dissertation Abstracts, 22, No. 72259.

9. Campbell, D. P. "Achievements of Counseled and Not-Counseled Students Twenty-Five Years After Counseling," Journal of Counseling Psychology. 12, 1965. pp. 334-339.
10. Colorado State Department of Education. Guidance in Colorado Secondary Schools--1962-63. Mimeographed.
11. Cottle, W. C. "The Evaluation of Guidance Services," Review of Educational Research. 27, 1957. pp. 229-235.
12. Cramer, S. H.; and Hern, E. L. "The Secondary School Guidance Experience and Reaction to College Counseling Services," The Vocational Guidance Quarterly. 15, 1967. pp. 181-185.
13. DeGregorio, W. J. "I Need to Find a Job," The Vocational Guidance Quarterly. 15, 1966. pp. 29-31.
14. Dugan, W. E. "The Organization and Administration of Guidance Services," Review of Educational Research. 40, April, 1960. 30, 105-114.
15. Dyson, E. "A Study of Ability Grouping and the Self-Concept," The Journal of Educational Research. 60, 1967. pp. 404-405.
16. Flanagan, J. C., et al. The American High School Student. Cooperative Research Project No. 635. University of Pittsburgh. 1964.
17. Flanagan, J. C., et al. Design for a Study of American Youth. Boston: Houghton Mifflin Co. 1962.
18. Flanagan, J. C.; Dailey, J. T.; Shaycroft, M. F.; Orr, D. B.; and Goldberg, I. A Survey and Follow-up Study of Educational Plans and Decisions in Relation to Aptitude Patterns: Studies of the American H. S. Cooperative Research Project No. 226. Project Talent Office. University of Pittsburgh. 1962.
19. Friedrichs, Alice J. (Ed.). Guidance Services for Minnesota Schools. Curriculum Bulletin No. 16. St. Paul, Minnesota State Department of Education. 1951.
20. Gonyea, G. G. "Appropriateness of Vocational Choices of Counseled and Uncounseled College Students," Journal of Counseling Psychology. 10, 1963. pp. 269-275.
21. Goodstein, L. D. "Five-Year Follow-up of Counseling Effectiveness with Probationary College Students," Journal of Counseling Psychology. 10, 1963. pp. 269-275.
22. Helling, J. F. Relationship of Selected Student and School Practices to Differences in Guidance Emphasis. Unpublished Doctor's Thesis, the University of Minnesota, Minneapolis. 1963.

23. Hill, George, E. Management and Improvement of Guidance. New York: Appleton-Century-Crofts. 1965.
24. Hill, A. H.; and Grieneeks, L. "An Evaluation of Academic Counseling of Under- and Over-Achievers," Journal of Counseling Psychology. 13, 1966. pp. 325-328.
25. Hoyt, K. B. The Nature and Adequacy of Guidance Services in the Des Moines, Iowa Public Secondary Schools in 1962. Mimeographed.
26. Hutson, Percival W. The Guidance Function in Education. New York: Appleton-Century-Crofts, Inc. 1958.
27. Idaho State Department of Education. Questionnaire for Evaluating the Effectiveness of Title V-a, N.D.E.A. Boise. 1962.
28. Jessel, J. C.; and Rothney, J. W. M. "The Effectiveness of Parent-Counselor Conferences," The Personnel and Guidance Journal. 44, 1965. pp. 142-146.
29. Liggit, J. D. An Evaluation of a Method Designed to Promote Teachers' Participation in the Guidance Program. Unpublished Doctor's Thesis, the University of Nebraska, Lincoln. 1962.
30. Louisiana Department of Education. Evaluation of Guidance Services in Louisiana Public Schools, Grades 7-12 for 1962-1963. Baton Rouge. 1962.
31. Mager, Robert F. Preparing Instructional Objectives. Palo Alto: Fearon Publishers. 1962.
32. Mathewson, R. H. Guidance Policy and Practice. New York: Harper and Brothers. 1955.
33. Mehrens, William. Evaluating Guidance--A Review of the Literature. Minnesota State Department of Education. 1963. 38.pp. Mimeographed.
34. Metzler, J. H. "Evaluating Counseling and Guidance Programs. A Review of the Literature." The Vocational Guidance Quarterly. 12, 1964. pp. 285-289.
35. Michael, Jack; Meyerson, Lee. "A Behavioral Approach to Counseling and Guidance," Harvard Educational Review. Vol. 32, No. 4, Fall, 1962. pp. 382-402.
36. Miller, C. H. Foundations of Guidance. New York: Harper and Brothers. 1961.

37. Miller, F. W. "Evaluating a Counselor Procedure," Journal of Educational Research. 40, 1952. pp. 61-69.
38. Miller, F. W. Guidance Principles and Services. Columbus: Charles E. Merrill Books, Inc. 1961.
39. Mississippi State Department of Education. Report of 1961-62 Evaluation of Testing Guidance, and Counseling Services in Mississippi. Mimeographed.
40. Missouri State Department of Education. A Questionnaire Evaluating Local School Guidance Practices and the Effects of N.D.E.A. as Reported by Certificated Counselors in Missouri. Jefferson City. 1962.
41. Montana Department of Public Instruction. A Report: College Freshmen Responses to An Inventory of Their High School Guidance Services. Helena. 1963.
42. Morrow, R. O. "A Study and Evaluation of the Guidance Services in the Virginia Public Secondary Schools," Dissertation Abstracts. 22, 5, 1961. p. 1512.
43. National Study of Guidance, Preliminary Report. Criterion Variables for the Evaluation of Guidance Procedures: A Taxonomy of Guidance Objectives. Contract OEG 3-6-001147-1147. University of Missouri. 31 pp. Mimeographed.
44. O'Dea, J. D.; and Zeran, F. R. "Evaluating Effects of Counseling," Personnel and Guidance Journal. 31, 1953. pp. 241-244.
45. Ofman, W. "Evaluation of a Group Counseling Procedure," Journal of Counseling Psychology. 11, 1964. pp. 159-164.
46. Oklahoma State Department of Education. A Handbook for the Improvement of Guidance and Counseling in Oklahoma Schools. Oklahoma City. 1961.
47. Patterson, C. H. "Evaluation of Guidance Services," Review of Educational Research. 33, April, 1963. pp. 214-224.
48. Peters, H. J. Guidance in Ohio. Columbus: Ohio State Department of Education. 1961.
49. Peters, H. J. "The Nature of The Guidance Function," in Saltzman, G. A. and Peters, H. J., Ed. Pupil Personnel Services: Selected Readings. Itasca, Illinois: F. E. Peacock Publishers, Inc. 1967.
50. Peters, H. J.; Shertzer, Bruce. Guidance: Program Development and Management. Columbus: Charles E. Merrill Books, Inc. 1963.

51. Proff, Fred. Research on Counseling. Contractor's Report, U. S. Office of Education, U. S. Department of Health, Education, and Welfare. 1965. 152 pp. Mimeographed.
52. Project Talent, Cognitive Growth During High School, Bulletin No. 6. University of Pittsburgh. April, 1967.
53. Richardson, L. H. "Grade Patterns of Counseled and Non-Counseled College Students," Journal of Counseling Psychology. 11, 1964. pp. 160-163.
54. Roeber, E. C.; Smith, G. E.; and Erickson, C. E. Organization and Administration of Guidance Services. New York: McGraw Hill, Inc. 1955.
55. Rogers, Carl R. "The Interpersonal Relationship: The Core of Guidance," Harvard Educational Review. Vol. 32, No. 4, Fall, 1962. pp. 416-429.
56. Rothney, John W. M. Guidance Practices and Results. New York: Harper and Brothers. 1958.
57. Rothney, John W. M.; and Farwell, G. F.; "Evaluation of Guidance and Personnel Services," Review of Educational Research. 30, 1960. pp. 168-175.
58. Rothney, John W. M.; and Roens, B. A. Guidance of American Youth. Cambridge: Harvard University Press. 1950.
59. Saltzman, Glenn A.; and Peters, H. J. Pupil Personnel Services: Selected Readings. Itasca, Illinois: F. E. Peacock Publishers. 1967.
60. Scarbough, B. B.; and Wright, J. C. "The Assessment of an Educational Clinic," Journal of Counseling Psychology. 4, 1957. pp. 283-286.
61. Shaw, Merville C.; Tuel, John K. "A Focus for Public School Guidance Programs: A Model and Proposal," in Saltzman, G. A. and Peters, H. J., Ed. Pupil Personnel Services: Selected Readings. Itasca, Illinois: F. E. Peacock Publishers, Inc. 1967. pp. 92-101.
62. Shertzer, Bruce; Stone, Shelley C. "Challenges Confronting Counselors," in Saltzman, G. A. and Peters, H. J., Ed. Pupil Personnel Services: Selected Readings. Itasca, Illinois: F. E. Peacock Publishers, Inc. 1967. pp. 212-219.
63. Shoben, E. J., Jr. "Guidance: Remedial Function or Social Reconstruction?" Harvard Educational Review. Vol. 32, No. 14, Fall, 1962. pp. 430-443.

64. Shoben, E. J., Jr. "Some Problems in Establishing Criteria of Effectiveness," Personnel and Guidance Journal. 31, 1953. pp. 287-296.
65. Strong, D. J. "A Factor-Analytic Study of Several Measures of Self-Concept," The Journal of Counseling Psychology. 9, 1962. pp. 64-70.
66. Strowig, R. Wray; and Farwell, Gail. "Programmatic Research," Review of Educational Research. 36, 1966. pp. 327-334.
67. Super, D. H.; and Overstreet, P. L. The Vocational Maturity of Ninth-Grade Boys. New York: Bureau of Publications, Teachers College, Columbia. 1960.
68. U. S. Department of Health, Education, and Welfare, Office of Education. Commitment to Youth. A Report on five years of progress in guidance, counseling and testing under Title V of the N.D.E.A., 1958-9/1962-3. U. S. Government Printing Office. 1964.
69. University of the State of New York. A Guide for the Review of a Guidance Program. Mimeographed.
70. Volsky, T., Jr.; Magoon, T. M.; Norman, W. T.; and Hoyt, D. P. The Outcomes of Counseling and Psychotherapy: Theory and Research. Minneapolis: University of Minnesota Press. 1965.
71. Wannamaker, Mary. A Presentation of Library Research as a Basis for the Reconceptualization of Vocational Guidance. Minneapolis: University of Minnesota. 1966. 57 pp. Mimeographed.
72. Wellman, Frank E. A Conceptual Framework for the Derivation of Guidance Objectives and Outcome Criteria: Preliminary Statements. Partially supported by the U. S. Department of Health, Education, and Welfare. 1967. 36 pp. Mimeographed.
73. Wellman, Frank E.; and Twiford, D. D. Guidance, Counseling and Testing: Program Evaluation. U. S. Department of Health, Education and Welfare. 1961.
74. Westbrook, B. W. "The Effect of Test Reporting on Self-Estimates of Scholastic Ability and on Level of Occupational Aspiration," The Journal of Educational Research. 60, 1967. pp. 387-390.
75. Wrenn, C. G. The Counselor in a Changing World. Washington, D. C.: American Personnel and Guidance Association. 1962.
76. Wrenn, C. G. and Dugan, W. E. Guidance Procedures in High School. Minneapolis: University of Minnesota Press. 1950.

Chapter 2

METHOD

The basic intent of this study was to search for evidence of relationships between various measurable aspects of guidance services, on the one hand, and various personal-social characteristics of students and other variables that have been presumed to be outcomes of guidance, on the other hand. Such evidence cannot of course, provide proof of ~~causal~~ ^{causal} relationships between guidance activities and desired outcomes, an ideal for evaluative research. It appears to this writer that controlled experimental studies of the "total impact" of guidance programs are not practically possible, for the reasons cited earlier--the complex, long-range nature of guidance goals, the interplay of a myriad of non-guidance influences operating for and against the attainment of guidance goals in the school, the home, and the total life environment, and the widely spread and thinned out impact of the guidance program, the effects of which may account for only a small percent of the total variance in student behavior.

Controlled studies have been done and should continue to be done on single, specific aspects of the total program such as counseling. Even then, as Rothney (8, p. 53) points out, such field studies necessarily fall far short of the rigorous conditions of psychological laboratory studies. As Rothney says, "When all the factors that can influence behavior are considered, it seems presumptuous to believe that a few hours of counseling, spread over a three-year period, could have any effect on an adolescent's behavior." Rothney did find differences between counseled and uncounseled students. The present study faced somewhat similar problems, but it was hoped that meaningful differences might be found among students exposed to different kinds and amount of guidance effort.

General Design

The study was conducted in five fairly distinct phases. The first two phases, dealing with sampling and instrumentation, were carried out concurrently in the summer and fall, 1965. The primary data collection phase was carried out during the winter, spring and summer, 1966, with follow-up data on the 1966 seniors collected in the summer, 1967. The fourth phase, the coding and analysis of data, was accomplished during the summers of 1966 and 1967. The project lay dormant during the 1966-67 school year, and the final phase, the writing of the report, was completed in 1968.

The first phase consisted of deciding upon a method for the selection of a sample of schools, selecting the sample, contacting the schools to request their cooperation, drawing samples of seniors and of graduates from each school that agreed to participate, and preparing lists of these students for the use of the field workers. The population, the sampling techniques, and the nature of the sample of schools and of students are described in the next section.

The second, concurrent phase, the search for and selection of appropriate, measurable variables to be included in the study, is discussed below in the section subtitled "Selection of Variables and Instrumentation." The variables selected for inclusion in the study, and the instruments used to measure them, are also listed. In retrospect it is evident that a great deal of time should have been allowed for this difficult and important phase of an evaluative study.

In the third phase of the study, data were collected in three stages. Information on a number of the variables was available in the files of the State Department of Education, the Statewide Testing Program office and elsewhere; most of this information was collected early in the study. Field workers visiting the schools collected most of the rest of the information, using questionnaires, tests, and other survey forms. Mail questionnaires were used for graduates, dropouts, and for the seniors of 1966 one year later.

The fourth phase, the statistical analysis, began with inter-correlations and other measures of relatedness and proceeded through factor analysis to partial regression equations in the attempt to reduce the huge mass of data to manageable size and to focus on major trends. In addition to the major analyses, comparisons of certain summary data, student comments, and other bits of evidence that seemed sufficiently interesting and meaningful to report are given either in Chapter 5 or in the appendices.

Population and Sample

The population of schools consisted of the 479 public secondary schools in Minnesota that graduated one or more students in 1964.¹ Because of the vast difference in school sizes, it was apparent that an unrestricted random sample would be inappropriate since it would load the sample with very small schools having no counselors and little or no guidance activity. For example, slightly over half of Minnesota's high schools graduate fifty or fewer students, but only 16% of Minnesota's seniors come from these schools. On the other hand, 50% of the total number of seniors are to found in the

¹In the initial research proposal a larger number of secondary schools (582) was given; however, when recent consolidations, very tiny schools that do not graduate seniors each year, and schools that do not go through the twelfth grade were eliminated, the number reduced to 479.

largest 12% of the schools. A random sample stratified by size was decided upon, but because enrollment figures for two-, three-, four-, and six-year secondary schools were not comparable, it was necessary to use size of senior class as the only reliable index of school size.

In 1964, Minnesota senior class sizes ranged from 7 to 930 and it was necessarily somewhat of an arbitrary decision as to how many size categories to have and where to draw the lines. A number of methods and cutoff points were examined, with most consideration given to the stratification used in Project Talent. Aiming for a 5% or one-in-twenty sample overall, Project Talent divided schools into four sizes and selected 1 in 50 in the smallest size, 1 in 20 in the next two, and 1 in 13 in the largest group. (5 : p. 48) The principle of sampling a relatively larger proportion of the smaller number of big schools with many pupils was followed in this study, but the four-part size division did not seem as appropriate as a five-level division which was decided upon. In Table 1 is shown the breakdown of schools by size of senior class. In Project Talent the schools below the "minimum size standards for schools recommended by educational authorities" (5 : p. 48) are divided into two categories, and those above into two. In Minnesota, per pupil cost of education has been calculated and it appears that the optimum size is not the largest size. Schools with graduating classes smaller than about 38 pupils have above average costs, as do schools with approximately 175 seniors or more. Thus, one category of small class sizes (1-38) and the two top categories, 175-399 and 400 and above, have above average per pupil costs, while the two in between are below average. It did not seem advisable to lump together all schools between size 39 and 175, since at about 70 seniors (or 400-500 students in the junior-senior high school) the school is likely to change from a one-counselor to a two counselor school with possible implications for guidance. Similarly the very broad top category (175-930) includes rather large schools found in fair-sized towns throughout the state but at the upper end includes only extremely large schools in the three largest cities and their suburbs; thus this category was divided in half, with the cut at 400.

As is indicated in the bottom row of Table 1, the desired goal of 20% sampling was approximated, with percentages ranging from 10% of the smallest schools to 60% of the largest, and a median of 20% by school size, or 18% of the total number of schools.

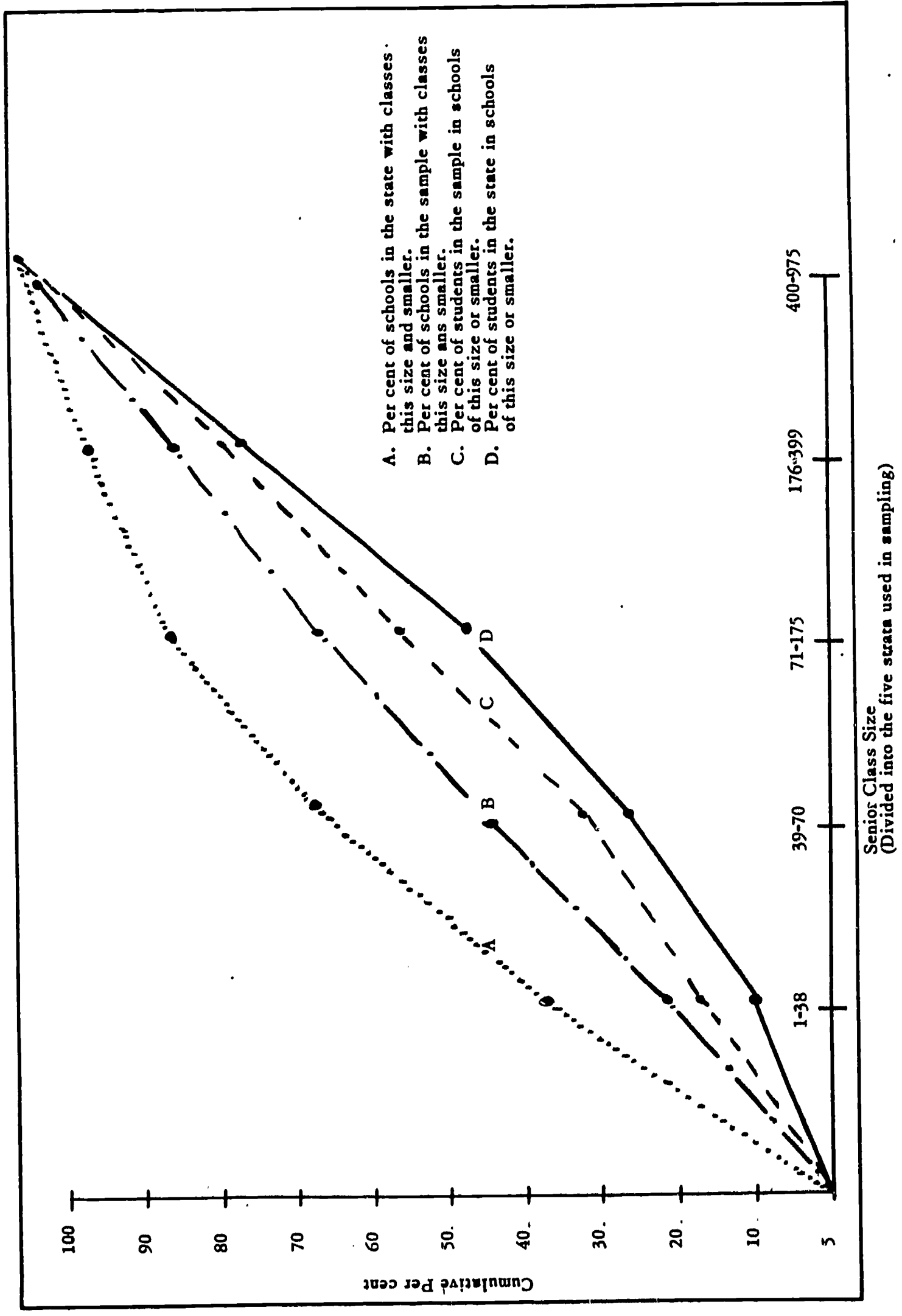
Table 1

Stratification Levels by Size of Graduating Class, and Details for the Various Strata for the State of Minnesota and for the Sample

	Size of Graduating Class					Total
	1-38	39-70	71-175	176-399	400 and up	
<u>IN MINNESOTA</u>						
No. schools this size	181	136	97	45	20	479
No. seniors in these schools	4,833	7,022	10,446	12,398	11,142	45,841
Percent of schools	37.8	28.2	20.2	9.6	4.2	100
Percent of seniors	10.5	15.3	22.8	27.0	24.4	100
<u>IN SAMPLE</u>						
No. schools this size	18	20	20	14	12	84
No. seniors sampled (approx.)	180	200	240	250	255	1125
Percent schools this size in sample	21.4	23.8	23.8	16.7	14.3	100
Percent of seniors in these schools	16	17.8	21.4	22.3	22.5	100
Percent in sample of total no. of schools of this size in state	10	15	20	30	60	Median 20% (18% of total state schools)

The percentage data from Table 1 are illustrated in Figure 1 in the form of cumulative percentages. On line "A" is indicated the cumulative percent of state schools by size of senior class for the five strata used in sampling, and on line "D" the cumulative percent of senior students in these schools. On line "B" is shown the cumulative percent of schools in the sample by strata. The discrepancy between "A" and "D" is evident, and the fact that the sample was selected to avoid both extremes. For example, it is evident from Figure 1 that 37% of the schools have class sizes below 38 (Line "A"), that only 10% of the seniors come from these schools (Line "D"), and that 22% of the sample schools are of this size (Line "B").

Figure 1 Comparison of Sample and Population by Senior Class Size (Senior class size being represented in two ways; cumulative per cent of students in a class of a given size and cumulative per cent of the schools with a given class size.)



Originally, it was planned to contact a 10% sample of seniors in the participating schools, with a minimum of ten from schools with less than 100 seniors.¹ However, the percent of seniors sampled in the large schools had to be cut back in order to make it feasible to test and interview the sample during the time of the school visit. In contacts with these schools, it became apparent that their class routines are frequently interrupted by studies and other events, and the principals were generally extremely reluctant to have the field workers stay on for more than two or three days. It was decided, therefore, to sample 10% of the first 100 seniors (or a minimum of 10), six percent of the next 100, and two percent of the remainder. The number to be selected was first determined, based on class size, and the names were then randomly drawn from the complete list of 1966 seniors for that school, as provided by the Statewide Testing Program office.

The sample drawn consisted of 1,132 seniors out of a total of 13,637 seniors reported in the cooperating schools, or approximately 8.3%. There was almost no loss in the process of collecting field data, and the final sample on which information was collected consisted of 1,116 seniors.

Line "C" of Figure 1 shows the cumulative percent of students in the sample, by size of senior class, that resulted from the above method of determining sample size. It is evident from Figure 1 that the sample is weighted more heavily from large schools, as is appropriate, but also that it avoids the extreme imbalance found in the schools of the state (as shown by Line "D").

The question may be asked as to why seniors alone were chosen to be sampled rather than members of each class in the school. It was believed that seniors would be most likely to have felt the greatest impact of the total year-by-year guidance program, so that observations made at that level would be most likely to show any differences that exist. Further, by taking seniors it became possible, within the time span of the study to get another measure a year after high school. Finally, the secondary schools in the state vary considerably in the number of grades (10-12, 9-12, 7-12, etc.), and an attempt to sample each grade in the school would have resulted in non-comparable samples.

In the event that any selected senior was not present during the school visit, field workers were instructed to take the next one on the alphabetical list of seniors.

¹One school had a graduating class of seven pupils; this school was omitted from the list. All others had graduating classes of 10 or more and were included in the drawing.

A random sample of 1,108 members of the previous (1965) class was drawn exactly as was the senior list, from the corresponding Statewide Testing Program list. These lists were also given to the field workers, who obtained current addresses for these graduates while in the community. These graduates were then contacted by mail questionnaire.

No list of teachers or of dropouts was available beforehand, so field workers were instructed to obtain these on arrival at the school. A list of six teachers was randomly drawn from the faculty list, and asked to fill out the "Teacher Questionnaire." A list of six dropouts and their addresses was obtained from the school files. There was no good way to make these lists random, and school authorities were relied upon to select a fairly representative list. Dropouts were contacted by mail.

All principals and all counselors in the 84 schools were contacted by the field workers, interviewed and asked to fill out questionnaire forms.

While most schools in the state offer one or more vocational courses (or courses with a vocational orientation) such as business, agriculture, home economics, or trade and industrial courses, the State of Minnesota has at the present time only one vocational high school. This school, the Minneapolis Vocational School, was included in the study.

Only one of the 84 schools selected refused to participate. This school was replaced by another of the same size, from the same geographic area and one that served students from similar socio-economic levels. Later two small schools requested permission to withdraw because of internal difficulties, and these were also replaced by similar schools. In Appendix A, a is provided a list of the schools in the study, the county in which each is found, the number of 1964 seniors (used as a basis for determining sample size), the number in the sample from each school, and some additional figures on returns from a later mail follow-up of these seniors. Appendix A, b is a map indicating how the schools were distributed throughout the state. The areas with many schools are, of course, the heavily populated sections of the state.

Selection of Variables and Instrumentation

In a study that is essentially a search for relationships among variables related to guidance, perhaps the most crucial and also most difficult task is the selection of appropriate variables to study, and the selection and/or creation of indices by means of which these variables may be measured. In preparing the proposal for the present study, a tentative list of variables was completed, but the final search for and selection of variables had to be made

after the grant was approved and work begun in the summer of 1965. After a tentative list of variables was prepared, it was necessary to search for instruments by which to measure these variables, and in many instances to devise relatively simple measuring devices such as check-off lists and graphic scales. After all of the indices that could be found or devised were ready it was necessary to make field tests and revisions, and then to send to Washington for approval of every form to be used in data collection. Only after this approval was granted was it possible to duplicate forms in quantity and to begin the field survey.

Since the contract contemplated that all field surveying be completed by the end of the 1965-66 school year, the time allowed for instrumentation was very short.¹ In retrospect, it seems that it would have been advisable to allow more time for this phase of the study; more instruments could then have been examined and more extensive field testing done.

As the review of the literature indicates, the variables to be studied in the evaluation of guidance may be classified in various ways. For the purposes of this study, three domains of variables were specified.

1. The first classification, called "input variables" or just "inputs" in this report, refers to characteristics and activities of guidance programs as they exist in Minnesota schools. This category includes not only the amount of activities, such as counseling, testing, meetings with parents, but also other aspects of the program such as student-counselor ratio, the guidance budget, adequacy of the occupational information file, and other measurable characteristics of guidance programs that provide indices of money and/or effort expended for guidance.

2. The second classification, called "situational variables" in this study, includes not only variables that describe the setting in which the guidance takes place (such as size and location of school) but also the kinds of variables elsewhere labelled student variables, client variables, and life-situation variables. Examples of such variables would be socio-economic status of the family and intelligence of the student.

¹The time for this phase of the study may be contrasted with the time taken for preparation and instrumentation in the so-called "National Study of Guidance" as reported by Wellman. Eight years after it was begun, the domains of variables have been specified and a taxonomy of tentative outcomes or criterion variables has been completed. At the time of this writing, appropriate criterion measures have not been specified for these "criteria," and no taxonomy of input or situational or student variables has appeared. (See review of the literature) Of course, the time taken may also reflect low priority placed on this guidance study.

Situational variables are, then, independent variables which are not part of the guidance process and are generally uncontrollable within the guidance process, but which may be presumed to have a bearing on guidance outcomes.

3. The third classification, called "outcome variables" or simply "outcomes" in this report, are personal-social characteristics and behaviors of students as well as other variables that appear to be indices of the attainment of guidance goals, both individual and social. In addition to characteristics of individual students such as achievement or vocational maturity, outcome variables include such indices as rate of dropout, amount of absence, percent of students taking post-high school training, and the like. Thus, there are individual outcome variables for students and single outcome variables for schools.

It should be clearly understood that in this study no before-after measurements of change were made; therefore, the variables labelled "outcomes" are not to be construed as indicating changes in student behavior. Rather, they are the kinds of variables that have been commonly thought to be outcomes of guidance. In this study the absence of these variables, or their presence in varying number or amount was measured, and these measurements related to inputs or indices of guidance effort, on the assumption that students who have been exposed to different kinds and amounts of guidance effort should have attained these objectives in different amounts and numbers.

Input variables were selected for study because they were listed in the literature as guidance functions or activities and because they were to be found in guidance programs in the state. Situational variables selected were those mentioned in the literature as bearing on outcomes or ones that the writer felt might bear on outcomes. Outcome variables, too, were those mentioned in the literature as being goals, objectives, or hoped-for outcomes of guidance. The only other basis for the inclusion of variables was the availability of some index for the measurement of the variable or the determination of its presence; or if no index could be found, the feasibility of developing one. No variables were excluded on the basis of the writer's judgment that they were not "good" inputs or outcomes, since it was not the intent of the study to prejudge the desirability of these variables but rather to seek relationships among them.

Not all variables fit clearly into one of the three selected categories, unfortunately. For example, time spent with a counselor seemed readily classifiable as an input variable, but how is one to treat the information that in school "A" a much larger percent of the students indicate that they would go to a counselor with personal problems than is true of school "B"? This information does not appear to fit the "input" or "situational" categories, but

neither is it clearly an outcome. It could be argued that favorable student perception of the guidance program is in fact a result of what is done in the program and that other outcomes cannot be attained if students will not see counselors; in this sense the statistic is a kind of "in-process outcome." On this basis, this particular variable was placed with the outcomes for purposes of the present study, but the reader is free to decide whether or not he agrees with the classification system at this and all other points.

Table 2 contains a list of all the variables on which data were collected and an identification of the sources of the data. All of the questionnaire forms and other instruments on which data were collected may be found in Appendix B, except for published instruments, in which case the publisher or source is provided. For all indices which were coded or scored in any way other than the actual raw score as on tests, the coding information is provided in Appendix D. The variables in Table 2 are listed separately for the three domains of input, situational, and outcome variables.

Table 2

Variables on Which Data Were Collected,
and Sources of Information On Each

VARIABLE	SOURCE ¹
A. INPUTS	
1. Extent to which administrator sets goals of guidance	GIQ
2. Salary budget for guidance ²	GIQ

¹The abbreviations listed in the "source" column refer to the following questionnaire forms (found in Appendix B):

GIQ--General Information Questionnaire
 GGQ--General Guidance Questionnaire
 ICQ--Individual Counselor Questionnaire
 TQ --Teacher Questionnaire
 SQ --Student Questionnaire (for 1966 seniors, visited in the schools)
 GQ --Graduate Questionnaire (for 1965 seniors, contacted by mail only)
 DQ --Former Student Questionnaire (for dropouts, contacted by mail)
 FQ --1966 Graduate Follow-up Questionnaire (one year after graduation)

²Preliminary study of state data indicated that the correlation between per-pupil salary cost of guidance correlated .95 with total per pupil cost, and was much easier to collect accurately.

(Table 2 continued)

VARIABLE	SOURCE
A. INPUTS (continued)	
3. Changes in guidance in recent years	GIQ
4. Student-counselor ratio	GGQ
5. No. years the school has had a formal guidance program	GGQ
6. Ratio of students to other personnel workers ¹	GGQ
7. Availability of outside referral sources	GGQ
8. Amount of clerical help for guidance department	GGQ
9. Amount of money for guidance per student	GGQ
10. Administrative cooperation in promoting and supporting guidance	GGQ
11. Administrative encouragement of teacher participation in guidance	GGQ
12. Board of Education support	GGQ
13. Amount of teacher guidance effort (as seen by guidance dep't.)	GGQ
14. Teacher-counselor cooperation (as seen by counselor)	GGQ
15. Privacy, convenience, and general adequacy of facilities for guidance	GGQ and observation
16. Adequacy and amount of use of student records	GGQ and observation
17. Extent of testing program and amount of use made of it	GGQ
18. Amount and uses made of occupational information	GGQ and observation
19. No. and use made of follow-up studies	GGQ
20. Amount and kinds of placement activities	GGQ
21. Number and kinds of group guidance activities	GGQ
22. Number and kinds of parent contacts	GGQ
23. Amount of guidance by teachers (as seen by teachers)	TQ
24. Percent of sample of students who had seen counselor	SQ and GQ
25. Ave. number of times counselor was seen	SQ and GQ
26. Ave. length of visit with counselor	SQ and GQ

¹Recent heavy additions of special personnel made possible by ESEA funds, plus many ways of figuring the amount of these workers' time to be allotted to the school in question made this figure totally unreliable and meaningless.

(Table 2 continued)

VARIABLE	SOURCE
A. INPUTS (continued)	
27. Ave. total time spent with counselor	SQ
28. Ave. depth of reasons for seeing counselor	SQ
29. Ave. score of counselor as rated by clients ¹	SQ
30. Percent of sample who knew counselor well enough to rate	SQ
31. No. years guidance program fully NDEA approved	State files
32. Counselor sex, marital status, training institution, and undergraduate major ²	ICQ
33. Yrs. teaching experience of counselor	ICQ
34. Yrs. counseling experience	ICQ
35. Yrs. in this school	ICQ
36. Yrs. other kinds of experience	ICQ
37. Membership in professional organizations	ICQ
38. No. of professional journal subscriptions	ICQ
39. Statement of goals of guidance as seen by counselors	ICQ
40. Percent time spent counseling	ICQ
41. Percent time spent on other guidance duties	ICQ
42. Percent time spent on non-guidance functions	ICQ
43. Number of non-guidance duties	ICQ
44. Percent interview time providing information, talking about orientation, conferring about next year's courses, seeing violators, career planning, on personal problems, etc.	ICQ
45. Percent interview time spent with students called in by counselor, referred by staff, and self-referred	ICQ
46. Overall rating of counselor by field worker	Field worker

¹This 29-item scale measuring counselor warmth, empathy, acceptance, understanding, and the like consists of items selected from the Barrett-Lennard scale and adapted to high school counseling situations, plus three items suggested by students during field testing (1).

²These items were used only with one-counselor schools. Items No. 33-46, are averages in schools with more than one counselor.

(Table 2 continued)

VARIABLE	SOURCE
B. SITUATIONAL	
1. Size of school (number of seniors)	GIQ
2. Recent changes in enrollment	GIQ
3. Percent men teachers	GIQ
4. Percent of teachers with advanced degrees	GIQ
5. Ave. no. years of teacher experience	GIQ
6. Ave. teacher salary	GIQ
7. No. of actual school days in school year	GIQ
8. Length of typical class	GIQ
9. No. students in typical English & social studies class	GIQ
10. No. of subjects offered	GIQ
11. Amount of ability grouping	GIQ
12. No. of special classes	GIQ
13. No. of "experimental" programs or classes	GIQ
14. No. of ways of achievement recognition	GIQ
15. No. of available extra-curricular activities	GIQ
16. No. of school facilities	GIQ
17. No. of community facilities for youth (cultural, recreational, etc.)	GIQ
18. Kinds of homes students come from	GIQ
19. Percent of students in college preparatory and other kinds of curricular programs ¹	GIQ
20. Distance to nearest college	GIQ
21. Distance to nearest vocational school	GIQ
22. Per pupil expenditure for education	State records
23. Local effort in mills for education	State records
24. No. of volumes in library	State records
25. Teacher-pupil ratio	State records
26. Size of town	State records
27. Academic ability as measured by Minnesota Scholastic Aptitude Test	Statewide Testing Program
28. Learning ability as measured by A.G.C.T.	Given at school
29. Climate of school, as shown by ave. scores on subtests of the test "What Your School is Like" ²	Given at school

¹Estimates of administrators as to what percent of their students were following various curricula turned out to be based on many different ways of considering what a student's curriculum is, and therefore unreliable except for pre-college curriculum.

²Nine subscales of a measure of school climate developed by McDill (7).

(Table 2 continued)

VARIABLE	SOURCE
B. SITUATIONAL (continued)	
30. Father's occupation	SQ, CQ, DQ
31. Father's and mother's education	SQ, CQ, DQ
32. Income level of family	SQ, CQ, DQ
33. No. of books in the home	SQ, CQ, DQ
34. Parents' expectations as to what student should do after leaving high school	SQ, CQ, DQ
35. Friends' plans after leaving high school	SQ, CQ, DQ
C. OUTCOMES	
1. Percent dropouts between grade 10 and 12 (boys, girls)	GIQ
2. Percent of 1965 and 1966 classes (boys, girls) going on to college and to other kinds of post-high school training	GIQ and field worker
3. Percent juvenile court cases	GIQ
4. Percent emotional problems referred or acted on aside from counseling	GIQ
5. Percent who fail and repeat courses	GIQ
6. Satisfaction of administrator with guidance program	GIQ
7. Help for teachers from guidance program as seen by teachers	TQ
8. Teacher satisfaction with guidance	TQ
9. Percent of sampled students who would see counselor with vocational, educational, personal problems	SQ, GQ, DQ
10. Percent who would see some person on school staff with these types of problems	SQ, GQ, DQ
11. Ave. depth of help received in counseling	SQ
12. Types and levels of help received; amount total help	GQ, DQ, FQ
13. Ave. judged helpfulness of counselor and guidance program, judged in school and one year later	SQ, FQ
14. Proportions of top 15% and bottom 15% of students going on to college and to other vocational training	Field worker
15. Percent attendance (lack of absences)	State records
16. Holding power (lack of dropouts)	State records
17. Vocational maturity (score on Crites' Vocational Development Inventory)	Given at school

(Table 2 continued)

VARIABLE	SOURCE
C. OUTCOMES (continued)	
18. Self-concept and acceptance of self-concept, as measured by Bills' Index of Adjustment and Values (here called Adjective Scale) (2)	Given at school
19. Academic self-concept, and judged importance of academic success, as measured by "Academic Self Estimate" (3)	Given at school
20. Achievement as measured by high school rank, the Minnesota English Test, and the Iowa Test of Educational Development, Test 5, Social Studies	Statewide Testing Program, and ITED given at school
21. Discrepancy between ability and achievement, as measured by the two ability tests and three indices of achievement	SQ
22. Discrepancy between ability (A.G.C.T.) and vocational choice ¹	SQ
23. Discrepancy between vocational ideal and actual choice as to level and as to field ¹	SQ
24. Success in post-high school training of graduates and of the class of 1966 one year later	Reports from schools
25. Satisfaction with life situation one year later	FQ
26. No. of extra-curricular activities	SQ
27. Discrepancy in satisfaction with guidance from senior year to one year later	SQ and FQ
28. Discrepancy between plans in high school and what graduate is now doing	GQ

¹See later discussion on how these discrepancies were arrived at.

Data Collection Procedures

Once the sample of schools was selected, each superintendent was sent a letter explaining the project and asking his approval of the data collection process. (A copy of this letter, as well as all letters and forms sent out during the data collection, may be found in Appendix C.) In the three largest cities, once the superintendent had been contacted, the principals of the selected schools were sent a similar letter.

Once the superintendent (and the principal in the big city schools) had approved, a letter was sent to the principal which he was asked to share with his counselors, further explaining the study and the upcoming visits of the field workers, and enclosing the questionnaire forms entitled General Information, General Guidance, and Individual Counselor. Later a telephone call was made to arrange the exact dates of the visitation and to give the names of the field workers who were coming.

Five teams of two field workers each were selected and trained. All of the members of these teams were women who were then or had been teachers or counselors, or were wives of counselors, or field data collectors of considerable previous experience. The enthusiasm, poise, astute judgment and overall competence of these teams of workers were largely responsible for the success of the field work.¹ The Director and Assistant Director trained the workers and supervised their early visits, but after that they completed the task without supervision.

A packet of materials had been prepared for each school and the field workers were provided with these packets prior to school visits. The packet included not only enough copies of questionnaires and tests for the sample of seniors and questionnaires for teachers, but also the list of seniors to be contacted, the list of last year's graduates for whom addresses were needed, instructions for coding materials and for making observations on occupational information files, student records and the like, instructions for rating counselors, forms on which to collect future plan information from the top and bottom 15% of the class, and other materials. (All of these materials will be found in Appendices B, C, or D.) The team spent an average of two days in each school, giving tests, making observations, collecting questionnaires and interviewing students and counselors.

¹The field workers were Shirley Bergum, Dorothy Dosse, Ivy Fineout, Jane Haller, Myrtle Johnson, Viola Marti, Helmie R. Peterson, Frances Ramaley, Margaret Stuart and Ingrid Wells.

During this time, material available in the State Department of Education and elsewhere was being collected and coded. When the field workers returned their packets, questionnaires were sent out to graduates and dropouts, and the final three tests were sent to the counselors to be administered at convenient times. Initially it had been planned to have the field workers administer all tests, but it became evident that time would not permit this, so that three tests were sent later to the counselors, administered and returned by them.

For every graduate who returned the questionnaire and indicated being in post-high school training, a form on which the student's progress could be indicated was sent to the training institution with the option of sending a transcript if the institution wished to do so. Both the graduates and the training institutions received follow-up notes if they did not return material within a reasonable time. The collection of these materials was not completed until late in the summer of 1966.

As materials were collected in the office or returned by field workers, counselors, graduates, dropouts, and post-high training institutions, they were codified and entered on special mark-sensing forms from which hollerith cards were then prepared.

The final data collection took place in the spring and summer, 1967. In May, the lists containing the names of the 1966 seniors were returned to the schools with a request for up-to-date information on these former students' addresses. A final follow-up questionnaire was then prepared and sent to each student in the sample. As these were returned, again a request went to the training institution for information as to success in training, for all of the students who indicated having been in post-high school training of any kind. The coding and punching of this information completed the collection of data.

Methods of Analysis

The first step in the computer analysis was the calculation of summary data and the preparation of frequency distributions, followed by intercorrelations of all of the indices. The overwhelming mass of intercorrelations proved to be formidable to analyze and interpret, and somewhat redundant.

Next, the director and staff looked through the intercorrelation matrices and discarded variables in each of the three categories which were totally unrelated to variables in the other two categories. Multiple regression equations were then computed for each of the remaining outcome variables, using all of the input and situational variables as predictors. A summary of this analysis is reported, giving the best combination of three to six predictors for each outcome.

It still seemed worth attempting to group or cluster the variables in some way so as to minimize the proliferation of inter-related results. To this end, the data were factor analyzed within each of the three categories, scale scores developed for each factor using the variables that loaded most heavily into the factor, and summary titles given each of the factors as represented by these scale scores. The interrelationships between these scaled scores for outcome factors on the one hand and input and situational factors on the other were then analyzed. Multiple regression equations were also developed for each of the factored outcomes, using the factored input and situational scale scores as predictor variables.

Because size turned out to be an important situational factor, and because certain kinds of counselor data tend to become rather meaningless in multi-counselor schools, similar analyses were run for the 28 schools in which there was only one counselor, and which are also rather homogeneous in size. Another situational factor that was important was student ability; accordingly similar analyses were run for schools of high and low average ability.

In addition, special analyses of follow-up data on the original senior class were made, as well as some comparisons by sex. Finally, certain other findings that are not amenable to statistical analysis but that appeared to have some meaning and significance are reported, such as comments from students and dropouts and field workers, variables that rather surprisingly did not relate to anything, and the like.

REFERENCES

1. Barrett-Lennard, G. T. "Therapy Response and Therapeutic Change," Psychological Monographs: General and Applied. 26, 43, 1963. pp. 1-36.
2. Bills, R. E. Manual for the Index of Adjustment and Values. Auburn, Alabama, 1958. 45 pp. Mimeographed.
3. Brookover, W.; Patersen, Ann; Shailer, Thomas. Self Concept of Ability and Scholastic Achievement. Cooperative Research Project No. 845, Michigan State University, 1962.
4. Crites, John O. "Measurement of Vocational Maturity in Adolescence." Psychological Monograph: General and Applied. 79, 2, pp. 3-86, 1965.
5. Flanagan, J. C., et al. Design for a Study of American Youth. Boston: Houghton Mifflin Company, 1962.

6. Fruchter, Benjamin. Introduction to Factor Analysis. New York: D. Van Nestrland Company, 1964.
7. McDill, E. L., et al. Sources of Educational Climates in High Schools. Cooperative Research Project No. 1999. Johns Hopkins University, 1966.
8. Rothney, John W. M. Guidance Practices and Result. New York: Harper & Brothers, 1958.

Chapter 3

CHARACTERISTICS OF THE SCHOOLS IN THE STUDY, THEIR STUDENTS AND THEIR GUIDANCE PROGRAMS

The first of the two major tasks undertaken in this exploratory study was to identify and measure various aspects of guidance programs; the second was to search for inter-relationships among these measures. The results of the first task are reported in this chapter. Descriptive statistics are presented on the 84 schools, 1,116 seniors, 869 graduates, 151 dropouts, and on the counselors and guidance programs. These data provide an overview of the setting in which the guidance effort was carried out, the nature and extent of the actual guidance programs and the variability in outcomes.

For purposes of this study, the variables were classified into three groups described elsewhere and identified as "situational," "input," and "outcome" variables. Consistent with this classification, the descriptive statistics in this chapter are presented separately for each of the three types of variables. The chapters that follow report the results of the search for relationships.

Situational Variables

The Schools

In Tables 3 and 4 are presented the central tendency and variability in certain characteristics of the schools studied, characteristics that appear to be related to guidance outcomes. The actual frequency distributions of all variables used in the study, if not presented in Chapter 3, may be found in Appendix E.

Table 3

Summary Statistics on Selected School Characteristics					
Variable	Low	Central Tendency		SD	High
		Mean	Median		
Number of seniors, 1966	25	182.39	98.5	187.90	785
Average MSAT score of senior class (raw score)	21	33.23	32.5	4.02	46
Average AGCT score of sample	92	117.47	118.0	13.40	128.5
Per pupil unit expenditure ¹	376	486.63	469.5	80.88	811
Local effort per pupil (in mills) ²	0	38.86	42.3	14.27	79
Number of subjects offered	20	46.69	40.7	20.34	99
Per cent in college preparatory courses ³	0	43.37	41.5	19.52	99

¹The total per pupil expenditure which includes operating costs, transportation, capital outlay and debt service.

²This is the mill rate it would take if the local school could raise its contribution to the cost on the valuation established by the Equalization Aid Review Committee.

³The percents estimated to be in other curricula were too unreliable to use.

Table 4

Summary Statistics on Selected School Characteristics, Grouped Data			
Variable	Low Interval	Estimated Median	High Interval
Percent of teachers with advanced degrees ⁴	0-15%	23.5%	66-75%
Average salary of teachers	\$5,201-5,700	\$7,029	\$8,000+
Number of days in the school year	172-173	175.2	182+
Number of extra-curricular activities available	7-8	13.0	21+
Number of school facilities available for students	0-12	19.4	27+
Number of community facilities	0-4	3.04	12+
Teacher Pupil Ratio	1 to 23	1 to 18.4	1 to 14
Number of Volumes in library	0-2,999	6,666	14,000+

⁴This item and those below it in Table 4 were reported on coded forms; thus the high and low are often a range of figures, as shown.

In Table 5 is presented the distribution of schools according to the size of the town in which the school is located and the distance to the nearest college or junior college and the nearest vocational school.

Table 5

Distribution of Schools on Selected Characteristics					
Size of town	f	Distance to College (in miles)	f	Distance to Vocational School (in miles)	f
100,000 & larger	9				
24,500-99,999	6	61-85	2	61-85	3
9,000-24,499	9				
5,000- 8,999	6	36-60	11	36-60	11
2,000- 4,999	13				
1,000- 1,999	13	11-35	44	11-35	42
625- 999	16				
350- 624	7	0-10	27	0-10	28
Less than 350	5				
TOTALS	84		84		84

The great range in size of school, size of town, and factors related to size are most evident in these tables. Related factors include the number of subjects offered, the number of extra-curricular activities, the size of library, and the number of school facilities. The fact that the mean class size is strikingly higher than the median indicates the extreme skew, with many small classes and a few very large ones.

The fact that schools are typically located within 35 miles of both colleges and vocational schools, with none further than 85 miles away, is largely the result of the recent establishment of a network of area vocational schools in the state, and the expansion of the state junior college program in addition to the fairly large number of colleges previously established throughout the state.

Also noteworthy are the wide ranges in average scholastic aptitude (MSAT) among the schools, and the wide ranges in percents of students in college preparatory courses. On the other hand, teacher-pupil ratios, number of school days, and even average salaries vary relatively little.

The Students

In Table 6 and Figures 2.8 are presented similar figures for the students in the sample and to the extent that they became available, on the graduates and a sample of dropouts from the schools in the sample.

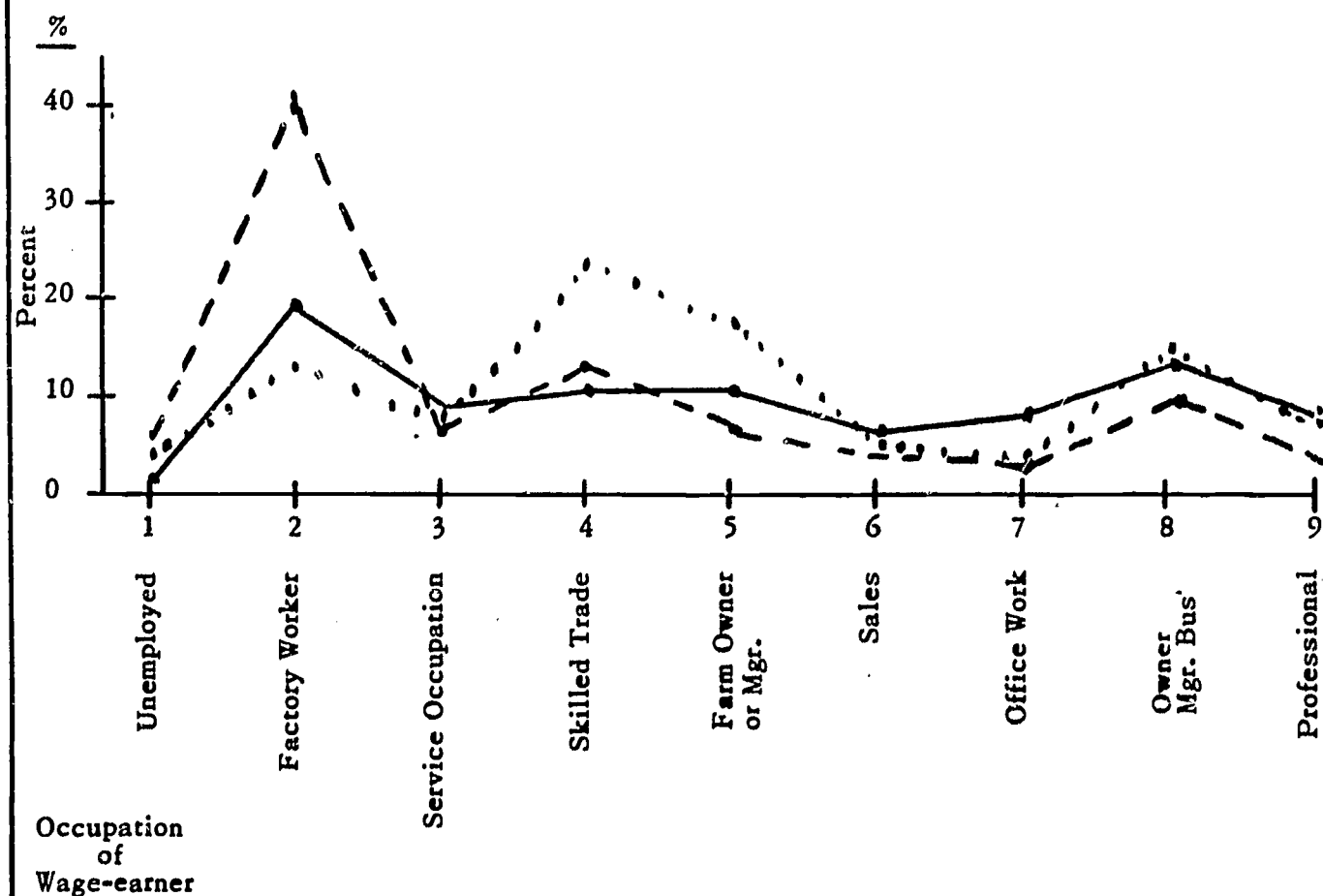
Table 6

Summary Statistics on Selected Characteristics of Students

Characteristic	Low	Mean	Median	SD	High
MSAT for 1966 seniors (raw score)	0	35.14	32.8	14.70	76
MSAT for 1965 graduates who responded to the questionnaire	7	36.50	34.9	14.23	76
AGCT for 1966 seniors	44	117.47	120.8	16.14	150

Figure 2

Wage-earner's Occupation



Graduates N=865 (3.6% are principal wage-owner)
 Dropouts N=149 (9.3% are principal wage-owner)
 Students N=1,098

Figure 3
Father's Education

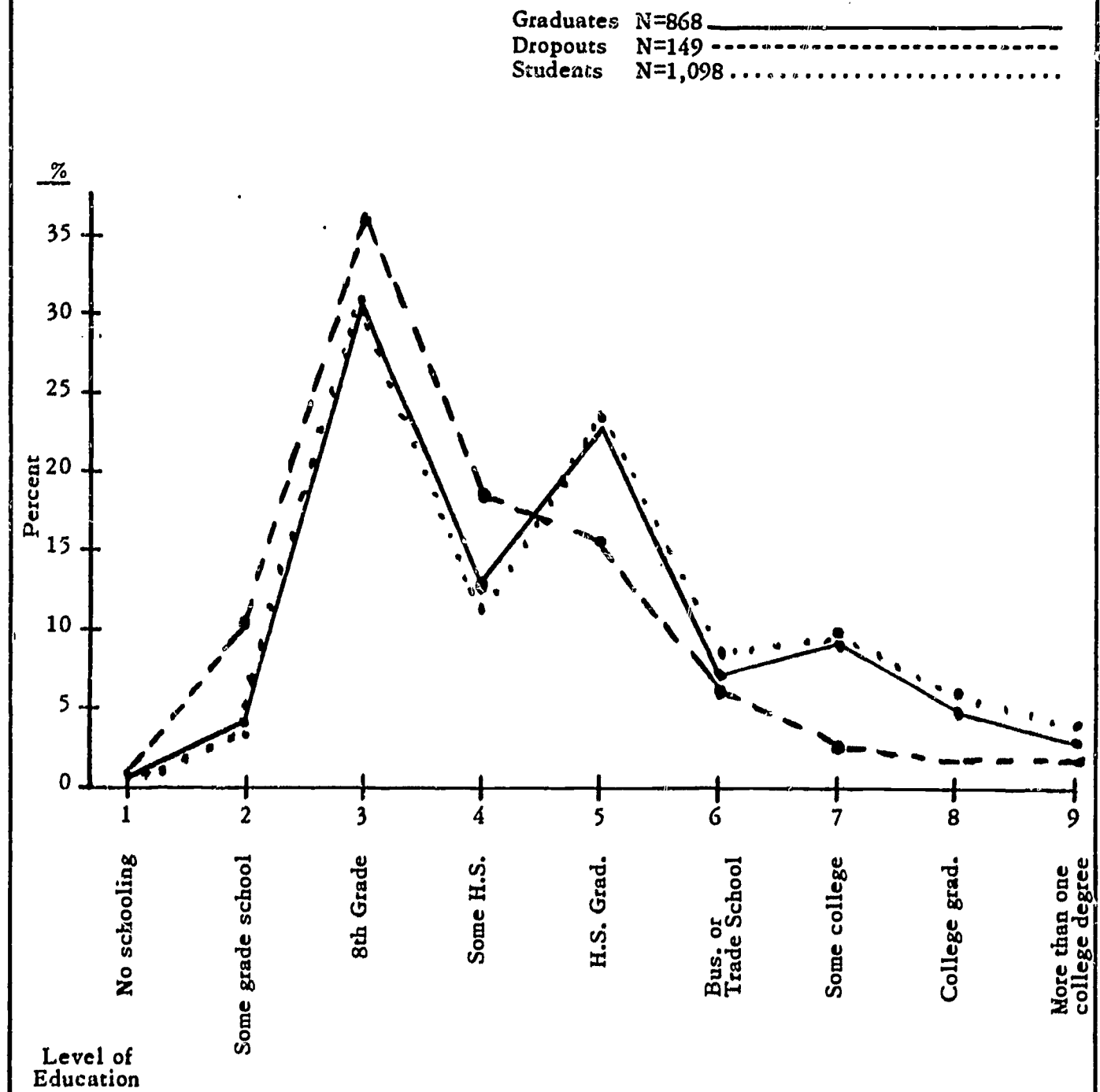
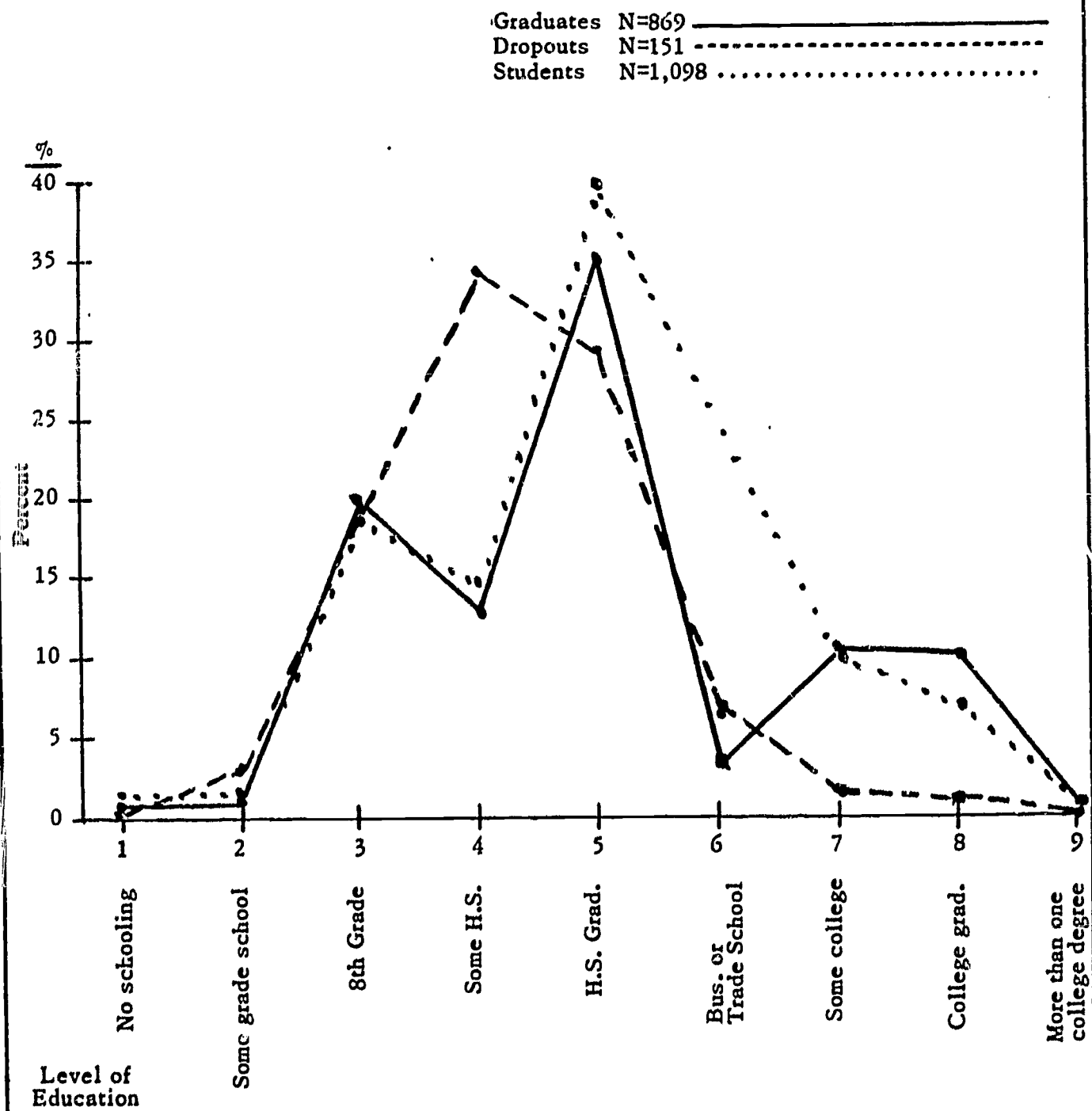
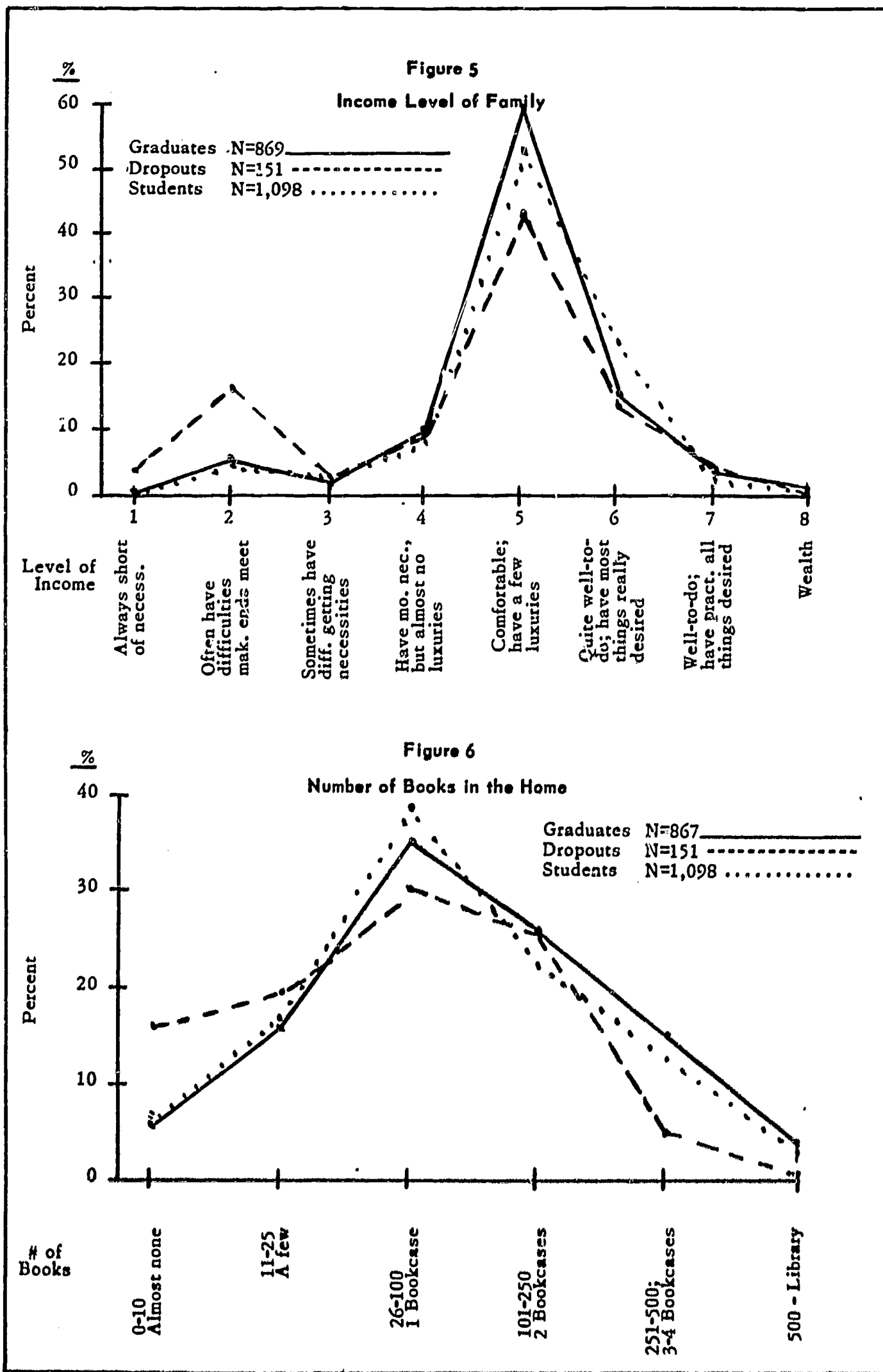
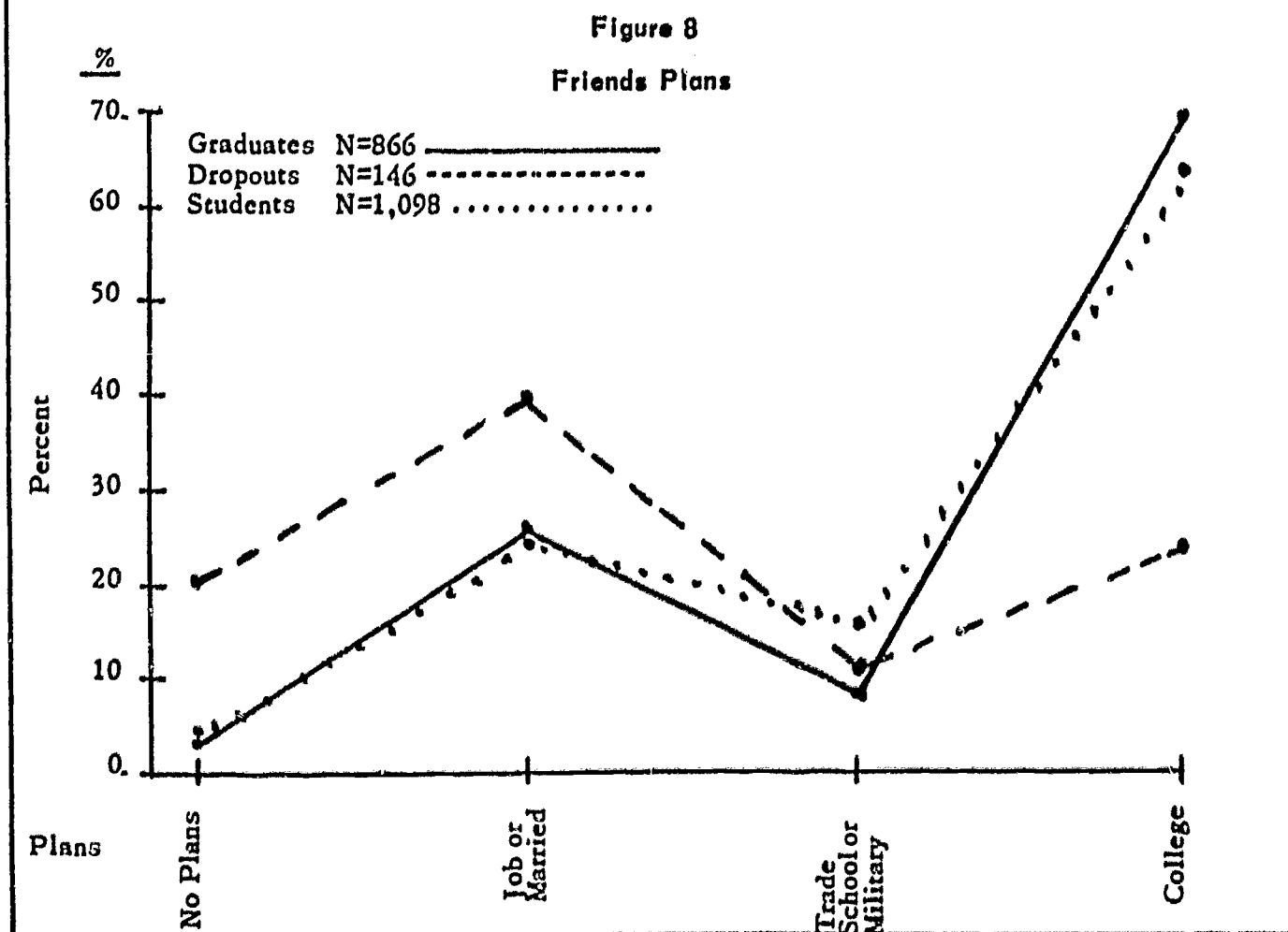
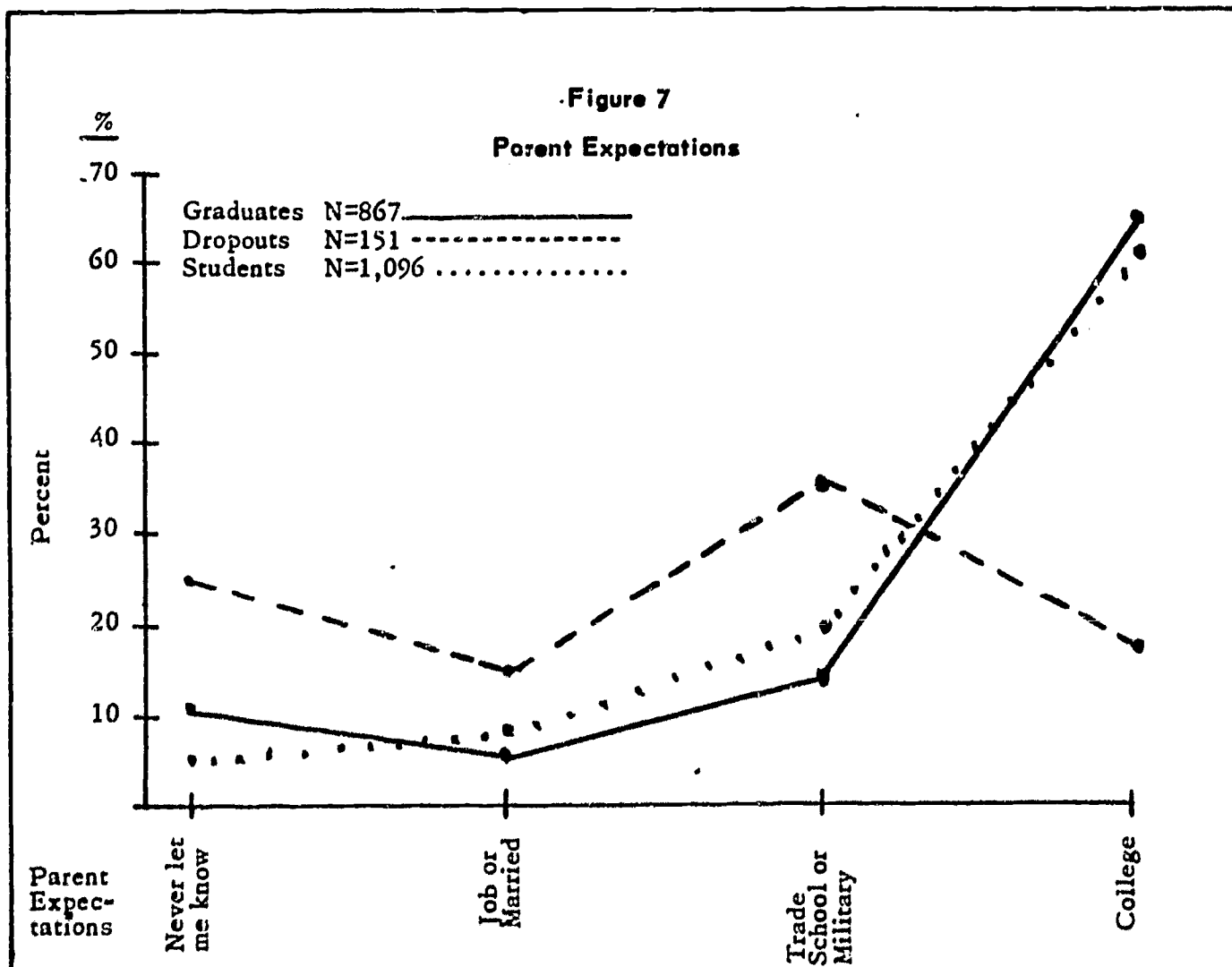


Figure 4
Mother's Education







As measured by the MSAT, the mean score for the entire population of 1966 seniors in Minnesota was 34.58, and the standard deviation was 14.70, as compared to 35.14 and 14.7 respectively for the sample. Thus the sample approximated the state population extremely closely. For the graduates of 1965 who returned the questionnaire,¹ the sample mean of 36.5 was slightly higher than the 34.4 mean for the state that year, indicating a very slight tendency for more high than low scorers to return the forms.

The distribution of occupations among wage-earners for the senior and graduate groups are almost identical and follow population trends, but the dropouts' responses show a larger proportion of wage-earners in lower level occupations. (Fig. 2) Both parents of the dropouts tend to have less education than do the parents of the other two groups, and the mother in all groups tends to have more education than the father. (Fig. 3 and 4) More dropouts than members of the other groups admit to having family financial difficulties, and fewer of them indicate that they are "comfortable" financially. The dropouts also report fewer books in the home. (Fig. 5 and 6)

It is interesting that 65-70% of both graduating groups see their parents as expecting them to go to college, and less than 20% as expecting them to go to a vocational school, while only a small percent of the dropouts' parents seemed to expect their children to go to college (when they were still in school). Fewer of the parents of dropouts let their children know what they expected. (Fig. 7) In general, these groups perceive their friends plans to be very similar to their parents' expectations for them except that relatively more of these young people apparently plan to go to work than would do so if parent expectations were followed. (Fig. 8) Perhaps there is some indication here of more realism in the plans of youth than the hopes of parents.

The fact that the responses of 1965 and 1966 seniors generally are extremely similar as illustrated in Figures 2-8 is some indication of the reliability of sets of sampling data.

¹A total of 1108 questionnaires was sent out to a random sample of graduates of 1965, but 40 were returned because the addressee could not be located. The 853 returned by the graduates represents at least 80% of those delivered to them.

Input Variables

Counselors and their Activities

Tables 7 through 10 present descriptive data on the 175 counselors in the 84 schools of this study. It should be noted that these counselors attended 29 counselor training institutions in 15 states, and among them majored in 25 different subjects in their undergraduate schooling. There were only 48 females among the counselors, indicating the strong preponderance of male counselors in Minnesota.

Table 7

Number of Counselors in the School			
Number of Counselors	f	Number of Counselors	f
7 counselors	2	2 counselors	13
6 counselors	4	1 counselor	28
5 counselors	3	One Uncertified Counselor	8
4 counselors	2	Certified Principals	1
3 counselors	12	Uncertified Principals	11

Inspection of Table 8 reveals a very wide spread of counseling and teaching experience among these counselors. The "typical counselor" in this group had about 10 years of teaching experience, about 5 years counseling experience, about 4 years of other employment, and had been in the current school for about 8 years. Since the average counseling experience was only 5 years, it appears to be a common practice to move from teaching to counseling in the same school.

This "typical counselor" belongs to 2-3 professional organizations, subscribes to 1-2 professional journals, spends 50-55% of his time in actual counseling, about 33% in other guidance duties, and 12-13% in nonguidance functions. About half of the students he sees are scheduled by him with 35% self-referred and 15% referred by the staff. More of his "face-to-face" time with students is spent on giving information than on any other activity (25%) with career planning a close second.

This "typical counselor" probably does not exist, for the standard deviations and ranges in Table 8 reveal extremely wide disparity in how counselor time is spent. For example, the average amount of time spent with violators of school rules is 5-7%, but the range is from none to 70%; the percent of students scheduled by the counselor ranges from 10 to 90, and from 10-80% of various counselors' time is actually spent in counseling. It is evident that counselors may be many things to many people, and a common title does not mean similar functions.

Table 8

Summary Statistics on Selected Counselor Characteristics and Activities

Characteristic	Low	Mean	Median	Sd	High
Number of years of teaching experience of counselor	1	11.45	9.5	6.85	36
Number of years counseling experience	0	5.05	4.9	3.55	22
Number of years in this school	1	9.84	8.0	6.84	35
Number of years other experience	0	4.37	4.1	2.32	9
Number of professional organization membership	0	2.17	2.26	1.50	5
Number of professional journals subscription	0	1.62	1.69	1.50	6
Percent guidance time spent counseling	10	53.77	52.00	14.91	80
Percent time spent on other guidance activities	10	32.50	33.00	11.55	65
Percent time spent on non-guidance functions	0	13.75	12.50	13.75	75
Number of non-guidance duties	0	2.35	2.15	1.74	9
Percent time providing information	2	28.25	25.42	12.10	60
Percent time on orientation	3	12.58	11.12	5.19	25
Percent time conferring about courses	5	14.83	14.92	6.73	30
Percent time seeing violators	0	7.33	5.22	8.38	70
Percent time on career planning	5	22.52	22.50	8.05	50
Percent time on personal problems	0	13.38	11.50	8.07	45
Percent of students scheduled by counselor	10	44.93	47.50	18.20	90
Percent referred by staff	5	17.67	15.18	10.24	70
Percent of self-referred students	5	37.69	35.08	17.92	85

Further evidence of the extreme variability of counselor functions was the actual list of nonguidance duties reported by counselors, a list including some 80 different functions. Most commonly listed duties were: doing clerical work of various kinds (nonguidance related), 27; taking attendance, 14; acting as class adviser, 14; student council adviser, 12. Some other duties were to act as substitute principal and/or teacher, register students, work on transcripts, chaperone dances, supervise halls and cafeterias, publish newspapers, coach, arrange award banquets. Then there were duties such as supervising pep fests, taking lunch

money, arranging bus trips, enforcing dress codes, selling gym suits, promoting Jr. Miss campaigns, and checking and cleaning out lockers.

Most counselors (142) belong to the Minnesota Counselors' Association as well as to local or area professional groups, and over half (92) indicated membership in the American Personnel and Guidance Association, but only 67 of these also belonged to the American School Counselors' Association, and just 29 to the National Vocational Guidance Association.

As shown in Table 9, the most common counselor assignment is to see any student who wishes to see him. In addition to the choices provided, 13 counselors reported special assignments such as one sex only, special class only, dropouts only, college-bound only, and some complex, mixed assignments. One counselor does home visits and works mostly with parents and teachers rather than students.

Table 9

Frequency of Various Types of Counselor Assignments	
Kind of Assignment	Number of Schools
1. Any student	55
2. One grade only	3
3. One class through school	4
4. A portion of each class	9
5. Other	13

Table 10

Frequency of Levels of Overall Rating of Counselors By Field Workers*	
Overall Rating	Number of Schools
5. 22.01 - 26.00	8
4. 18.01 - 22.00	22
3. 14.01 - 18.00	38
2. 10.01 - 14.00	13
1. 10.00 or less	3

*See Appendix "C" for a description of what the ratings mean.

Aspects of the Guidance Programs

Most of the scales used to measure aspects of guidance, such as the availability of outside referral sources, amount of teacher-counselor cooperation, and the like, are relative scales built

to produce an approximation of the normal curve. The distribution of scores on such scales is not too meaningful in itself, except as an indicator of how well the scale succeeded in producing the desired distribution. For the interested reader, the distributions are to be found in Appendix E, and when necessary he can consult Appendix A and Appendix D for more of the relevant information on scores.

The data in Tables 11 to 15 are presented here because these are absolute figures and also figures usually considered to be important aspects of the potential success of guidance activity-- money, the amount of time the program has been in existence, time it has been approved as minimally adequate, and amount of help the counselor has to free him from clerical details.

Table 11

Distribution of Salary Budget for Guidance

N = 84
 Mean = 19.6
 Sd = 7.5

Dollars Per Pupil	f	Dollars Per Pupil	f
9. 38.01 or more	3	4. 18.01 - 22.00	20
8. 34.01 - 38.00	3	3. 14.01 - 18.00	18
7. 30.01 - 34.00	0	2. 10.01 - 14.00	7
6. 26.01 - 30.00	8	1. 10.00 or less	10
5. 22.01 - 26.00	15		

Table 12

Distribution of Student-Counselor Ratios

N = 84		Mean = 540.02		Sd = 199.41	
S/C ratio		f	S/C ratio		f
950 = 999		9*	550 = 599		7
900 = 949		0	500 = 549		6
850 = 899		3	450 = 499		16
800 = 849		0	400 = 449		16
750 = 799		1	350 = 399		14
700 = 749		3	300 = 349		4
650 = 699		3	250 = 299		1
600 = 649		1			

*All ratios higher than 1 to 999 are also included in this interval.

Table 13

Number of Years That A Formal Guidance
Program Has Existed in the Schools
(Including the Assignment of Guid. Functions to a Trained Counselor)

N = 84		Mean = 6.68		Sd = 2.82	
Number of years of Formal Guidance		f	Number of years of Formal Guidance		f
9 years +		38	4 years		4
8		7	3		1
7		5	2		1
6		11	1 or less		11
5		6			

Table 14

Number of Years the Program has had NDEA Approval*

N = 84		Mean = 2.63		Sd = 2.69	
Number of Years		f	Number of Years		f
7 years		13	3 years		5
6		5	2		3
5		6	1		13
4		9	0		30

*NDEA Approval means that the State Department of Education has reviewed the guidance program and found it to be at least minimally adequate in terms of S/C ratio, facilities and other factors.

Table 15

Amount of Clerical Help Available per Counselor

N = 84		Mean = 2.46		Sd = 0.91	
Days Per Week		f			
5 or more		1			
Over 2 - less than 5		12			
1 - 2		24			
Less than 1		35			
0		12			

The State Department of Education has set up standards which schools must meet in order to be approved to receive financial support for guidance from the funds provided under Title V, National

Defense Education Act. Table 14, showing the number of years of NDEA approval, could be misleading in that a school may have been approved for a year or more and not be approved at the present time; thus it may be that more than 30 schools were on the non-approved list. This seems probably since a minimum student-counselor ratio for approval has been 460 to 1 (recently changed to 400 to 1), whereas in Table 11 it is reported that both the mean and median ratios for these schools are too high to meet the minimal criterion.

Another NDEA criterion has been a minimum of one day per week per counselor of clerical help; yet, as shown in Table 15, 47 schools do not meet this criterion. It is also possible, of course, that due to rising enrollments and for other reasons some schools may have lost ground between the time of approval for NDEA funds and the time of the survey.

The scale on which schools checked the number of years they had had a formal guidance program of some sort turned out to be inadequate, since 38 of the schools checked the maximum category of 9 years or more. These were generally the larger schools, and in some cases the term "trained counselor" was probably interpreted as a teacher with some course work in counseling.

Student-Counselor Contacts

The tables below indicate variations among the schools in the sample in the average amount of contact students have with their counselors, in reasons for seeing counselors, in how well counselors are known and how they are rated.

Table 16

The Proportion of Students Who have been in to see a Counselor, and the Average Number of Times They Saw Him, by School.

Percent of Sample Who had seen the Counselor		Average Number of times seen	
	f		f
96 - 100	70	25 - 26	1
92 - 95	2	23 - 24	0
88 - 91	5	21 - 22	0
84 - 87	0	19 - 20	0
80 - 83	3	17 - 18	0
76 - 79	0	15 - 16	3
72 - 75	0	13 - 14	0
68 - 71	1	11 - 12	6
64 - 67	0	9 - 10	16
60 - 63	0	7 - 8	18
52 - 59	0	5 - 6	21
48 - 51	1	3 - 4	14
44 - 47	0	1 - 2	5
40 - 43	1		

That the counselors are maintaining some kind of contact with students is evident. In 70 of the 84 schools, practically every student had spent some time with the counselor (Table 16); in fact, of the total of 1,116 students interviewed, 1063 or 95% had visited with their counselors. The average number of times the counselor was seen by the total school sample ranged from 1-2 in one school to an extreme of 25-26 times in another. Typically, senior students have seen their counselors 6 to 9 times during their last three years in school (Table 16). Of the total of 1063 students, 251 had seen the counselor 3 times or less, and 55 had seen a counselor 18 times or more.

The average length of visits with counselors varied as widely as the number, from one school where the average student saw the counselor for 50 minutes each time to 5 schools where 8-10 minutes was the length of the average visit. Most typical was about 18-20 minutes (Table 17).

Table 17

Average Length of Visits with Counselors, and Average Total Time Spent with Counselor, By Schools.

Average Length of Visit with Counselor	G19A 1965 Seniors	S19A 1966 Seniors	Average Total Time with Counselor	G19B 1965 Seniors	S19B 1966 Seniors
Minutes	f	f	Minutes	f	f
47 -	0	1	420 - 449	0	1
44 - 46	0	0	390 - 419	0	1
41 - 43	0	1	360 - 389	0	0
38 - 40	1	0	330 - 359	1	2
35 - 37	0	0	300 - 329	0	1
32 - 34	1	2	270 - 299	0	1
29 - 31	4	7	240 - 269	0	3
26 - 28	9	6	210 - 239	2	4
23 - 25	7	10	180 - 209	5	7
20 - 22	22	15	150 - 179	8	15
17 - 19	15	15	120 - 149	10	10
14 - 16	15	9	90 - 119	23	15
11 - 13	10	13	60 - 89	23	14
8 - 10	0	5	30 - 59	12	9
			0 - 29	0	1

It appears that students generally saw their counselors either for rather "superficial" reasons such as updating records or getting college catalogs, or for matters pertaining to high school life such as grading or curricular planning. In very few schools did students,

on the average, see counselors about serious career planning or personal problems. It should be noted, first, that individual students did, of course, see counselors for "level 4" reasons; and second, that the word "superficial" refers only to what is widely accepted as actual counseling. Any reason for seeing the counselor may be important to the student (except perhaps being called in to update record information.)

Table 18

Average Depth of Reasons for Seeing Counselor, by School	
N = 84	"Mean" = 5.10
	Sd = 1.63
Depth of Reasons	f
9. 4 and 3 levels (1 and 2 if they occur)*	0
8. 4 and 2 levels (2 if it occurs, but not 3)	6
7. 4 level only	9
6. 3 and 2 level (1 if it also occurs)	22
5. 3 and 1 level (not 2)	18
4. 3 level only	15
3. 2 and 1 level	9
2. 2 level only	3
1. 1 level only	2

*Explanation of the levels of help:

Level 1: Most superficial level. Includes simply seeking information such as college catalogs or military information; also includes being called in to "update" his record, and the like. NOTE that a student seeking such information, may also be seeking counseling help, in which case it is at a deeper level.

Level 2: Somewhat deeper. Minor, fairly routine help sought, such as how to drop a class or enter one or other scheduling problem; seeking permission to be absent; interpretation of a score on a general test; suggestions on getting part time job; help in understanding school regulations; minor infraction of rules, and the like.

Level 3: Still deeper. Includes planning high school curriculum (without going into career planning); seeing counselor about more serious difficulty in school; dissatisfaction with low grades; seeking study help; problem of financing post-high school education, and the like.

Level 4: Deepest level. Includes actual serious career planning (probably involving test taking and interpretation); problems in getting along with others (shyness, etc.); real personal problems (family trouble, feelings of inferiority, date trouble, etc.); anxiety about vocational choice, and the like.

Despite what must have been rather brief contact at times, a very large number of students felt able to rate their counselors and did rate them on a scale measuring empathy, warmth, acceptance, respect and like qualities of counselor response to students. (Tables 19 and 20). In fact, every student in the sample in 42 of the 84 schools rated the counselor, and even at the other extreme, a third of the sampled students were able to rate. The counselors fared well in the ratings, with the average rating in only one school being on the negative side of the scale (Table 20; a score of 87 would be perfectly neutral).

It is of interest to note that only 214 of the 1116 students felt that they had a choice as to which counselor they could see, although in some multi-counselor schools the counselors indicated that the students had a choice but apparently did not know that. Asked their preference for a counselor of their own or the opposite sex, 503 preferred their own sex, 59 the opposite sex, and 546 had no preference.

Table 19

Percent of Students, by School, Who Felt Able to Rate Counselor on a Scale of Counselor Response to Clients¹

N = 84		"Mean" = 91.48		Sd = 14.19	
Percent	f	Percent	f		
100	42	60 = 64	0		
95 = 99	3	55 = 59	1		
90 = 94	17	50 = 54	0		
85 = 89	5	45 = 49	0		
80 = 84	8	40 = 44	1		
75 = 79	4	35 = 39	0		
70 = 74	1	30 = 34	2		
65 = 69	0				

Table 20

Average Student Perception of Counselor Response to Clients, by School¹

N = 84		"Mean" = 106.68		Sd. = 7.81	
Ave. Counselor Score	f	Ave. Counselor Score	f		
122 = 123	1	98 = 100	1		
119 = 121	1	95 = 97	6		
116 = 118	7	92 = 94	2		
113 = 115	11	89 = 91	1		
110 = 112	15	86 = 88	0		
107 = 109	13	83 = 85	0		
104 = 106	8	80 = 82	0		
101 = 103	7	77 = 79	1		

¹See Appendix B, p. 25 for the Scale referred to in Tables 20-21.

Outcome Variables

As noted in Chapter 2, some outcome variables are single figures for a school, while others are individual figures for each student in the sample. Most of the correlational analysis is based on school averages for the individual student figures, since the major purpose of the study was to determine how guidance procedures in schools relate to presumed outcomes. However, summary statistics on individual student variables also provide some insights into the nature of the outcome variables and the students on whom the measurements were taken. This section, therefore, reports both kinds of data. Data not shown in this chapter may be found in Appendix E.

By Schools

Table 21 is of special interest because the figures illustrate the apparent inconsistencies that occur in reports from the same source on the same or similar data. The principals in the sampled schools were asked to give the percent of boys and of girls who drop out between grades 10 and 12; these percents are shown in the second and third columns. These schools also report the number of dropouts (not by sex) in a special form to the State Department of Education. The third column is taken from that report for the previous year. It is evident that they reported generally higher dropout rates to the State than to the field workers. Changes during the year might account for some of the differences but certainly not all of them.

Table 21

Rate of Dropout for Boys, Girls, and Total Student Body
Between Grades 10 and 12, by School

N = 84

Percent Dropouts, Gr. 10-12	This Study		Report to State All Students
	Boys	Girls	
3% or less	32	40	11
4% to 7%	32	30	12
8% to 11%	11	6	17
12% to 15%	5	2	16
16% to 19%	1	1	8
20% to 23%	0	0	9
24% to 28%	2	2	5
29% to 34%	0	2	3
35% or more	1	1	3

Table 22

Extent of Identified Legal or Emotional Difficulties
Among Students, by School

N = 84

Percent	On Probation or committed for Correction	Receiving Treatment for Emotional Problems, or Hospitalized
8 % or more	5	2
7%	0	0
6%	0	1
5%	2	0
4%	3	1
3%	9	1
2%	8	3
1%	42	43
None	15	33

4

Table 22 is based on the number of cases known to the administrator. It should be noted that later analysis suggested a positive relationship between known incidence of emotional problems and a feeling of mutual regard among students and counselors and teachers. If, indeed, students feel more free to disclose their troubles in an atmosphere of trust, the assumption that a low incidence of reported problems is a desired outcome of guidance may be very questionable, exemplifying once again the complexity of the criterion problem.

In Table 23 can be seen the wide variation in the number of high school graduates going on to college (from none to almost all), and the fact that more girls than boys apparently go on to some kind of vocational school other than college.

Table 23

Percent of Graduates Going on to Post High School
Training, by School

N = 84

Frequency			Frequency		
Percent to College	Boys	Girls	Percent to Vocational Schools	Boys	Girls
Over 70%	4	4	Over 21%	3	11
61 - 70%	5	3	19 - 21%	4	6
51 - 60%	9	7	16 - 18%	6	2
41 - 50%	10	13	13 - 15%	9	15
31 - 40%	21	19	10 - 12%	15	14
21 - 30%	20	17	7 - 9%	8	6
11 - 20%	8	13	4 - 6%	20	9
1 - 10%	5	6	1 - 3%	12	15
None	2	2	None	7	6

As shown in Table 24, these schools typically fail 3-4% of their students, with some variation. Without doubt, the most striking fact revealed in Table 25 is that in 49 of the 84 schools, none of the sampled students would go to a counselor with personal problems. It is also evident that a generally higher proportions of students would go to the counselor with vocational than with school problems, and that staff members other than counselors tend to be seen as someone to go to with school problems more often than counselors.

Table 24

Percent of Students Who Fail and Repeat Courses, by School

Percent Repeating	No. of Schools	Percent Repeating	No. of Schools
15% or more	3	5 - 6%	15
13 - 14%	1	3 - 4%	25
11 - 12%	0	1 - 2%	21
9 - 10%	3	None	8
7 - 8%	8		

Table 25

Percent of the Sampled Students Who would go to the Counselor, and Percent Who would go to some school staff member, with Various Problems, Reported by School¹

No. of Schools in which the given percent would see the Counselor about:			Percent of Sample	No. of Schools in which the given percent would see some school staff member about:		
Voc. Probs.	School Probs.	Personal Probs.		Voc. Probs.	School Probs.	Personal Probs.
4	3	0	91 - 100%	8	9	0
6	2	0	81 - 90%	10	19	0
13	10	0	71 - 80%	18	13	0
15	17	0	61 - 70%	19	20	0
18	10	0	51 - 60%	12	14	0
13	15	0	41 - 50%	6	6	0
6	7	2	31 - 40%	7	2	2
5	7	3	21 - 30%	3	1	6
0	7	11	11 - 20%	0	0	18
1	3	19	1 - 10%	0	0	24
3	3	49	Zero %	1	0	34

¹The figures on the right for some school staff are larger than the figures on the left because they include the counselor.

Each student in the sample who had ever seen a counselor was asked to describe in some detail what occurred, and what kind of information or help he received. His answers were then coded on a "levels of help" scale (See Appendix D, pp. 8 and 9). The proportion of students receiving counseling in depth concerning personal problems or career development was then recorded for each school. Table 26 presents the results of this inquiry.

Table 26

Percent of Sample Receiving Counseling in Depth, by Schools			
Percent Counseled in Depth	No. Schools	Percent Counseled in Depth	No. Schools
81% or more	0	31 - 40%	8
71 - 80%	2	21 - 30%	11
61 - 70%	0	11 - 20%	9
51 - 60%	4	1 - 10%	22
41 - 50%	3	None	25

It appears that in 25 schools there was no counseling in depth, and in well over half the schools, less than 10% of the students had such counseling.

In Table 27 are presented summary statistics on several outcome variables where full tables did not appear to furnish much additional data (Tables may be found in Appendix E). Some of these are single figures for a school; the rest are school averages. Thus, for example, the mean Academic Self-Concept is the mean of school means and the standard deviation is the standard deviation of school means.

Table 27

Summary Statistics on Several Guidance Outcome Variables, by School

Variable	Mean	S.D.	Range	Max. Value
Percent yearly attendance	93.15	2.2	86-98	100%
Administrative satisfaction with guid.	6.1	1.6	1-9	9*
Ave. teacher satisfaction with guid.	5.7	1.3	3-8	9*
Ave. student satisfaction with couns.	4.4	.8	2-6	7*
Ave. depth of counseling help	4.5	1.4	1-8	9*
Ave. academic self-concept	18.6	1.6	14.5-23	40
Ave. score, "Imp. of school success"	12.4	1.1	9.8-16	28
Ave. self-concept (I.A.V.-1)	185.4	6.48	161-198	245
Ave. self-acceptance (I.A.V.-2)	175.8	6.78	159-191	245
Ave. vocational maturity (V.D.I.-M.)	38.2	4.47		50

*Each of these is a coded score; see Appendix D for code values.

Using the same nine point scale, administrators appeared to be slightly more favorably disposed toward their guidance programs than were teachers, but they also varied more in their opinions. The average depth of help reported by the students is more than superficial but not at the level of serious career planning or personal counseling. The rest of the summary figures will be of value chiefly to these readers wishing to compare school averages elsewhere with those in this sample.

There are two other kinds of outcome variables to which attention should be drawn although no summary tables are presented. These are "training success" and the several discrepancy scores.

In an effort to reach out beyond the confines of the school in measuring outcomes, two attempts were made to assess post-high school training success; for the previous class and for the seniors. The class of 1965 was contacted by mail, and for every questionnaire returned in which attendance at any school was reported, that school was contacted regarding the student's success. Over half of the graduates returning questionnaires were or had been in training, and over 90% of the institutions responded. However, the resulting figures were not very comparable, either within or among schools. The "mean training success" for any school could be the score of one student or the average of almost the total sample; the schools attended varied from barber schools to Bible schools to Harvard and M.I.T. In order to make any comparison at all, one simple form usable by all kinds of post-high institutions had to be used (see Appendix B-34), but this further desensitized the instrument. It is also probable, despite the 80% return, that more successful graduates returned the form than failing ones. The results on the senior follow-up survey are analyzed later.

Achievement in school and level of vocational choice are meaningful outcomes only when related to ability. Discrepancy measures were developed between ability, as measured by the Minnesota Scholastic Aptitude Test and the Army General Classification Test, and achievement as measured by high school rank and scores on the Minnesota English Test and the Iowa Test of Educational Development No. 5, Social Studies. Further discrepancy scores were obtained between the occupational level of the student's ideal occupation and his actual choice, and between his actual choice and ability as measured by the A.G.C.T. Occupational choices and ideals were given A.G.C.T. score values. These were obtained from the table provided by Naomi Stewart (1), Table III, p. 130 in Shartle (3) or were converted into A.G.C.T. equivalents of the G.-score on the G.A.T.B. test, using the G-levels given to occupations in the latest Dictionary of Occupations in the latest Dictionary of Occupational Titles, Volume II.¹

¹There were no sources of information available for some of the newer occupations, such as computer programmer and astral engineer. Two psychologists estimated these by comparing the occupations to ones on which information was available.

Two kinds of discrepancies may occur; for example, the occupational choice may be above or below the measured ability. These "shooting high" and "shooting low" discrepancies were recorded and treated separately. Finally, since all of the estimated "occupational mean scores" are rather crude estimates, the scores were converted to stanines and stanine discrepancy obtained. The listing of all of these discrepancies in table form is relatively meaningless.

By Students

The summary statistics in Table 28 are for the entire sample of students who took the test. From the ranges in scores and the standard deviations, it is apparent that there is tremendous variability in scores on the Index of Adjustment and Values, and relatively little variability in Vocational Development Inventory scores. The VDI and the ITED tend to be skewed negatively.

Table 28

Summary Statistics on Several Tests used in Measuring Outcomes, by Student

Test and Trait Measured	N	Mean	S.D.	Range
English Achievement (Minn. Eng. Test)	1098	34.09	12.45	0 - 71*
Social Studies Ach. (I.T.E.D., No. 5)	1061	36.87	9.95	8 - 53
Self-Concept (I.A.V.-1)	1098	185.37	21.27	99 - 245
Self-Acceptance (I.A.V.-2)	1098	175.68	20.59	67 - 245
Vocational Maturity (V.D.I.-M)	1044	38.81	4.66	18 - 49

*24 students took this test and scored zero points

Table 29 is presented to show how the actual distribution of high school ranks came out with random selection of the seniors of 1966. It is evident that the sample is quite representative in this respect, with the exception of some loading in the top two deciles relative to the bottom three. Field workers were instructed to select the next name on the senior list when one of the seniors on the random list given them was no longer in school. It is likely that those who dropped out between the junior year statewide testing and the spring of the senior year tended to be those lowest in their classes.

Table 30 presents the number of extra-curricular activities in which the students participated, by sex and total. It is evident that girls tend to participate in more activities than boys,¹ that almost everyone does something, and that a substantial number carry on eight or more activities while in high school.

¹The difference is significant at the .01 level. This and other sex differences are reported in Chapter 3.

Table 29

Distribution of Sampled Students by High School Rank			
High School Percentile Rank	Frequency	High School Percentile Rank	Frequency
91 - 100	127	41 - 50	126
81 - 90	125	31 - 40	103
71 - 80	110	21 - 30	95
61 - 70	110	11 - 20	100
51 - 60	112	1 - 10	103

N = 1098

Table 30

Extent of Participation in Extra-Curricular Activities							
No. of Activities	Frequency			No. of Activities	Frequency		
	Male	Female	Total		Male	Female	Total
8 or more	64	108	172	3	83	73	156
7	29	42	71	2	88	58	146
6	31	60	91	1	86	48	134
5	54	62	116	None	61	30	91
4	65	56	121	TOTALS	561	537	1098

Again, the tables showing discrepancies of various kinds do not provide very useful information. It may be of interest to note that not only do the AGCT equivalent scores of "ideal" choices go as much as 40 points above real choices but also that so-called realistic choices sometimes go as much as 27 AGCT points higher than the "ideal" choice. At first thought this may seem strange, but there are instances in which, for example, a boy might ideally want to farm but realistically has decided to become an accountant, or he might want to be a musician but has decided to study law. Similar and even larger discrepancies occurred between measured AGCT score and occupational choice, both ways. Where choice is well above measured ability, it seems fairly evident that the student is shooting rather unrealistically high, but what can be said about the real choice being higher than the ideal? Perhaps it implies vocational immaturity; in any case it means that if the student's practical occupational choice is far removed from his ideal choice, a real discrepancy exists.

One other kind of discrepancy was also recorded; this is the discrepancy in fields of work (rather than level) between the ideal and real occupational choices. Actually, for purposes of

correlational analysis it is coded as congruence rather than as discrepancy.¹

Table 31 presents information on the number of students who would go to various sources of help with vocational, school, and personal problems. It is evident that the counselor is seen as the major source of help with vocational and school problems, but is hardly perceived at all as a help with personal problems. Not only do the family and adult friends provide the basic source from which these young people seek personal help, they run a strong second to counselors in the vocational area and match teachers even in the area of school problems. The peer group is the second most important place to seek aid (and perhaps comfort?) for personal problems.

Table 31

Perceived Sources of Help for Vocational,
Personal, and School Problems

Person to go to:	Kind of Problem					
	Vocational		School		Personal	
	No.	%	No.	%	No.	%
Counselor (assigned guidance person)	641	58	578	53	67	6
Other member of school staff	90	8	224	20	36	4
Parent, relative, other adult not in school (e.g. minister)	303	28	224	20	732	66
Friend, buddy (peer)	46	4	52	5	226	20
No one I can or would go to	18	2	20	2	37	4

It should be noted that the question as to whom the student would go to was open-ended (Appendix B, p. 23) and was classified later, so that the choice of "no one" for example, was not one that could be picked out of a list. A few students gave answers which could not be classified within the selected categories (such as God), but almost every answer fit one or another category. The janitor was mentioned a number of times as a "staff source" of help.

¹Speaking of discrepancies, the students in filling out their forms spelled the word "counselor" in at least 20 different ways, each one phonetically reasonable depending upon fine nuances in the pronunciation of the title. (A few examples: councler, consular, consolar, counscelor).

In Figures 9 and 10 can be seen the proportion of students in the samples who indicated that they had received various types of help from the counselor (Fig. 9) and someone on the school staff, including the counselor (Fig. 10). Exactly the same questions were asked of the graduates of 1965, the dropouts, and later of the graduates of 1966 in a follow-up questionnaire; thus each group had been out of school for some time and answered these questions in retrospect. The answers of the groups are compared in the line graph.

It can be seen in both figures that the responses of the graduates of two years are almost identical, and that the dropout group differs from but usually only in that a smaller proportion of them recalled receiving the various kinds of help. About two-thirds of the two graduating groups report receiving test information from counselors and almost as many received information about colleges. Much help was also reported in school matters such as choosing courses, changing classes, and the like.

At the other extreme, almost no one reports receiving help in work placement, either while in school or after leaving, or in getting teachers and/or parents to understand him. Perhaps more surprising is the small proportion who were helped with study habits or provided information on military services. The two figures are very similar except that when all school staff are included, the proportions of students reporting help goes up slightly.

In the next 21 figures (Figures 11 through 31) can be seen a breakdown by source of the help the students reported for each of the 21 kinds of possible help received. The numbers in parentheses indicate the percent of that sample group receiving that kind of help. For example, in Fig. 11 it is indicated that approximately 39% of the 1965 graduates, 35% of the 1966 graduates, and 30% of the dropouts report receiving help in getting to know their school. The graph lines break down the sources of this help. Again, taking Fig. 11 as an example, of those graduates of 1966 getting help in knowing the school, 40% received that help from counselors, 27% from teachers and coaches, 18% from principals and the rest from specialists or someone else. By perusing these figures, counselors and other school personnel can get some idea of how they are perceived as sources of help relative to others. (It is important to keep this in mind. For example, as noted in Fig. 29, counselors clearly did more than others in helping students find work after graduation, but only 6-7% of students received such help from anyone). Counselors appear to be most helpful in choosing courses, planning courses, changing subjects, giving information on colleges, vocational schools, and the military, as well as on financial aids and various occupations. Teachers appear to be most helpful in learning study habits and in getting the teachers to understand the student (!). Principals seem to be helpful when the student is in trouble.

Types of Help From Counselor

Key to x Axis of Figure 9

Level 1 Type Help

1. Getting to know school
2. Information on trade and vocational school
3. Information on colleges
4. Information on military service

Level 2 Type Help

5. Changing subjects
6. Choosing courses
7. Information on test scores
8. Information about different occupations and careers
9. Finding part-time or summer work

Level 3 Type Help

10. Planning high school to fit future
11. Learning to study or improve grades
12. Getting teachers to understand me
13. Help in better understanding my abilities, aptitudes, etc.
14. Getting parents to understand me
15. Getting financial aid
16. Finding work after graduation
17. Deciding on a college or vocation school to fit my needs

Level 4 Type Help

18. Help when I was in trouble in school
19. Understanding myself
20. Deciding on a career congruent with my abilities, aptitudes

Other

21. Other

Figure 9

Percentage of Each Group (Dropout, 1965 Graduate, & 1966 Graduate Follow-up) Re

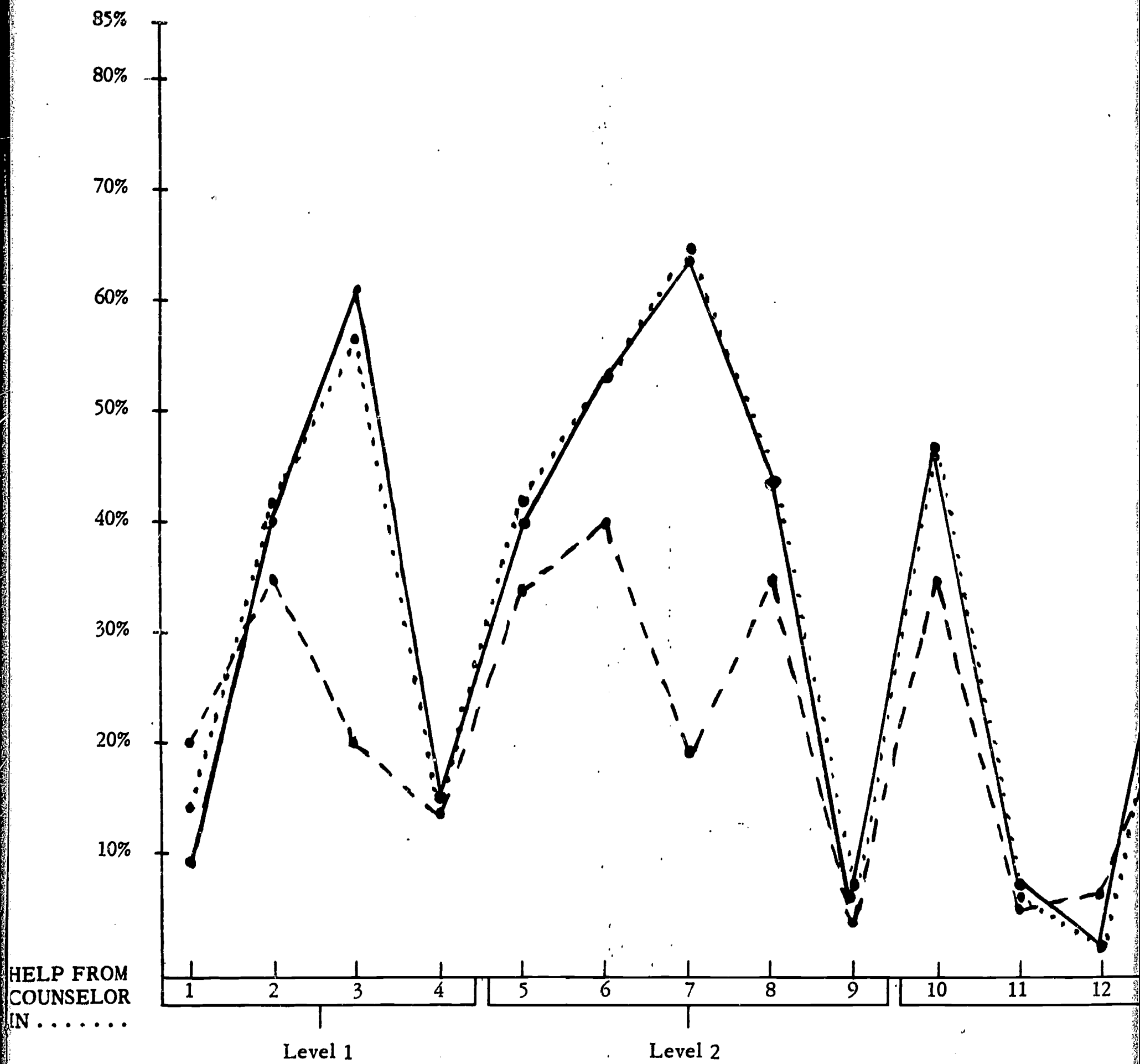
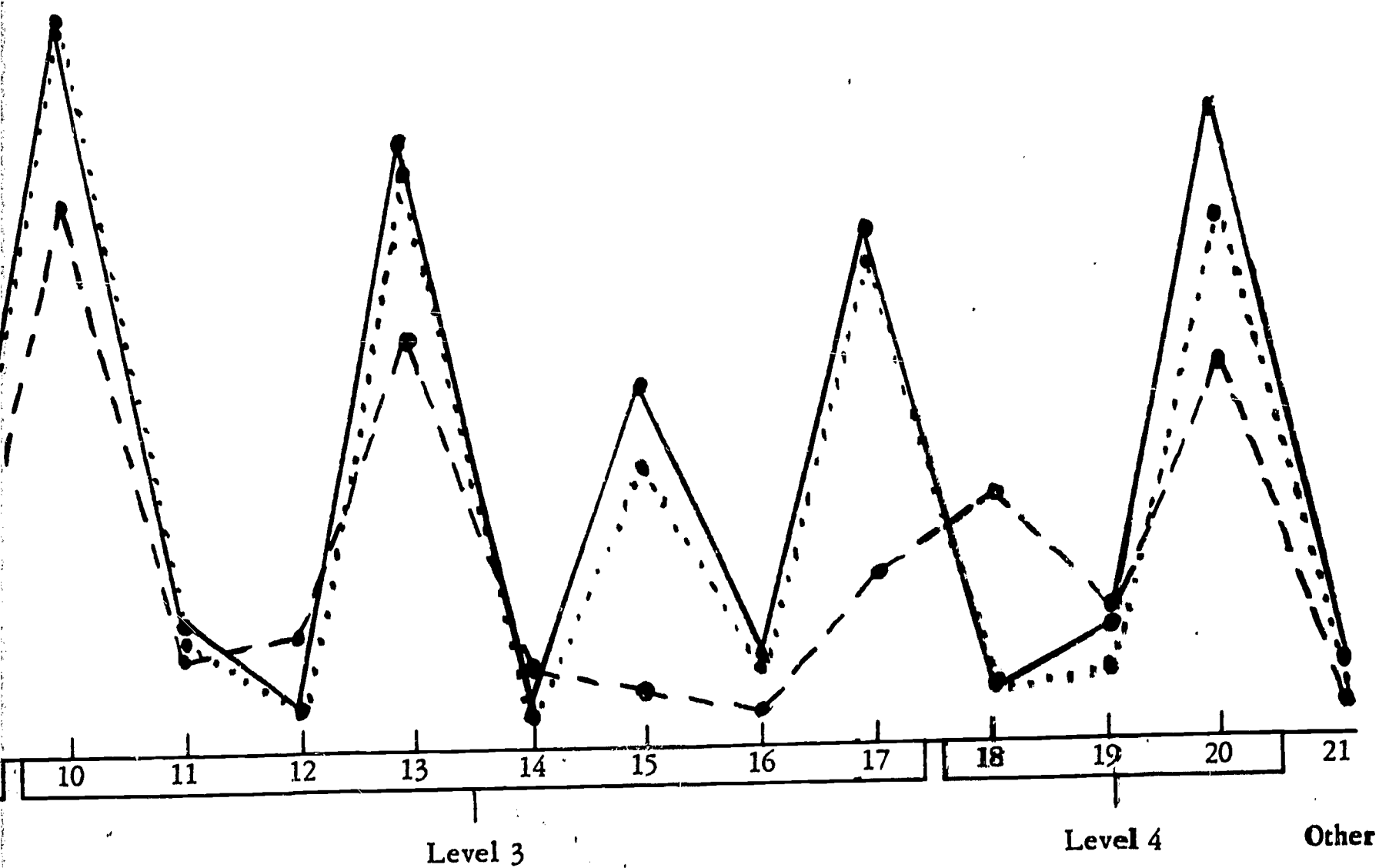


Figure 9

6 Graduate Follow-up) Receiving Each Type of Help From Counselor

Dropout N=151,
1965 Graduates N=869,
1966 Graduate Follow-up N=857



Types of Help From Someone in the School

Key to x Axis of Figure 10

Level 1 Type Help

1. Getting to know school
2. Information on trade and vocational school
3. Information on colleges
4. Information on military service

Level 2 Type Help

5. Changing subjects
6. Choosing courses
7. Information on test scores
8. Information about different occupations and careers
9. Finding part-time or summer work

Level 3 Type Help

10. Planning high school to fit future
11. Learning to study or improve grades
12. Getting teachers to understand me
13. Help in better understanding my abilities, aptitudes, etc.
14. Getting parents to understand me
15. Getting financial aid
16. Finding work after graduation
17. Deciding on a college or vocational school to fit my needs

Level 4 Type Help

18. Help when I was in trouble in school
19. Understanding myself
20. Deciding on a career congruent with my abilities, aptitudes

Other

21. Other

Figure 10

Percentage of Each Group (Dropout, 1965 Graduate, & 1966 Graduate Follow-up) Receiving Each Type of Help From

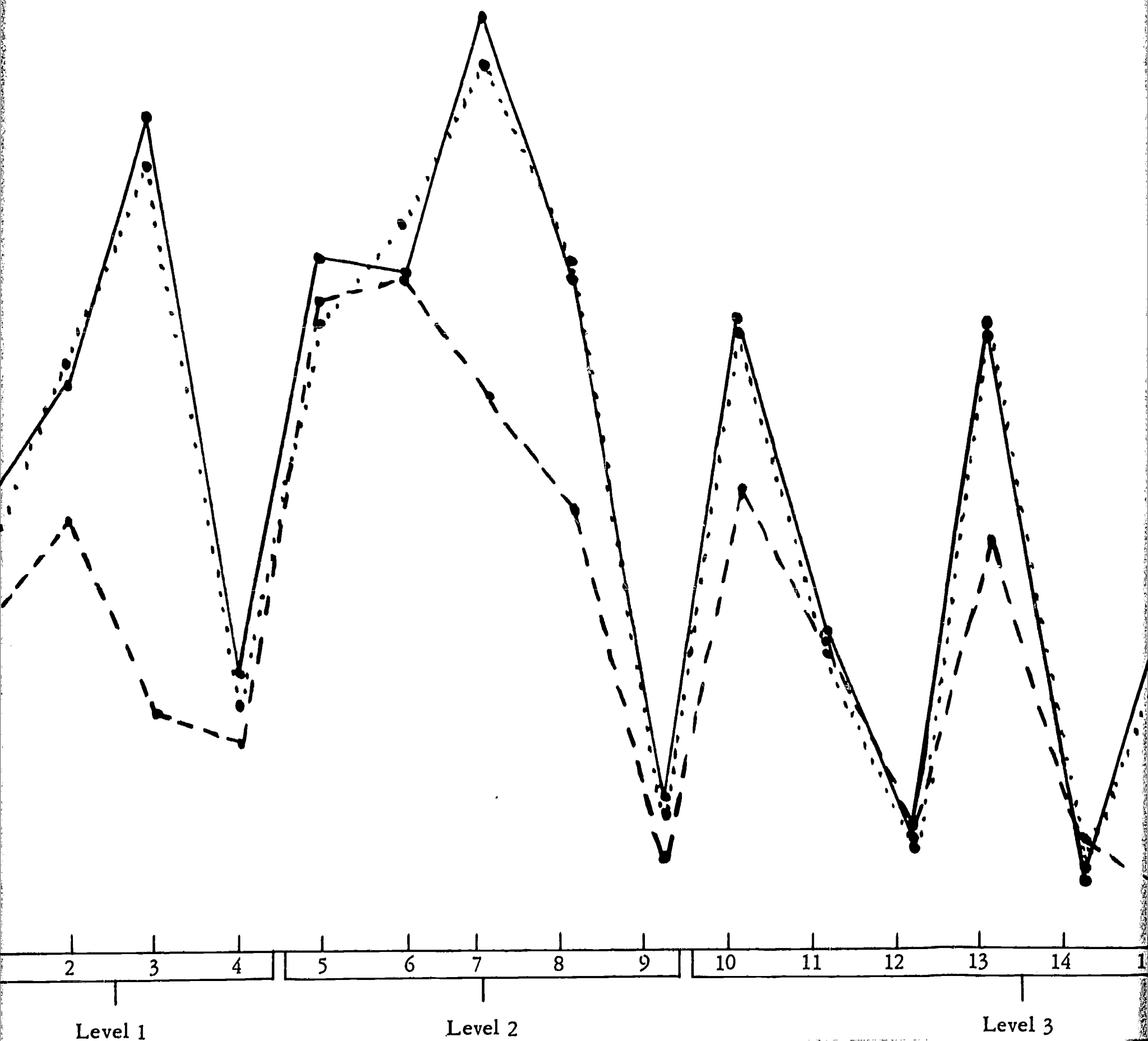


Figure 10

6 Graduate Follow-up) Receiving Each Type of Help From Someone in the School

Dropouts N=151,
1965 Graduates N=869, _____
1966 Graduate Follow-up N=857

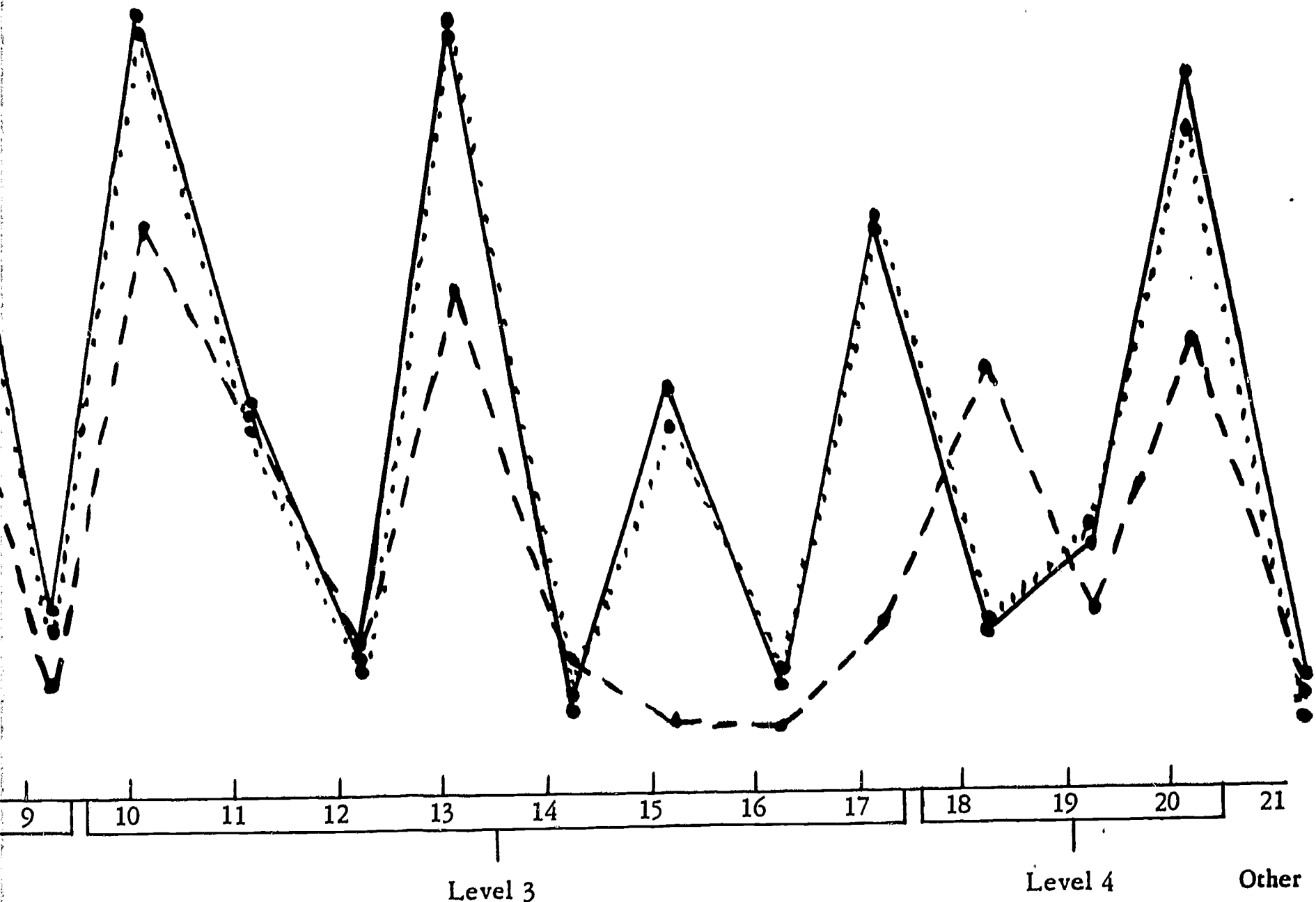


Figure 11

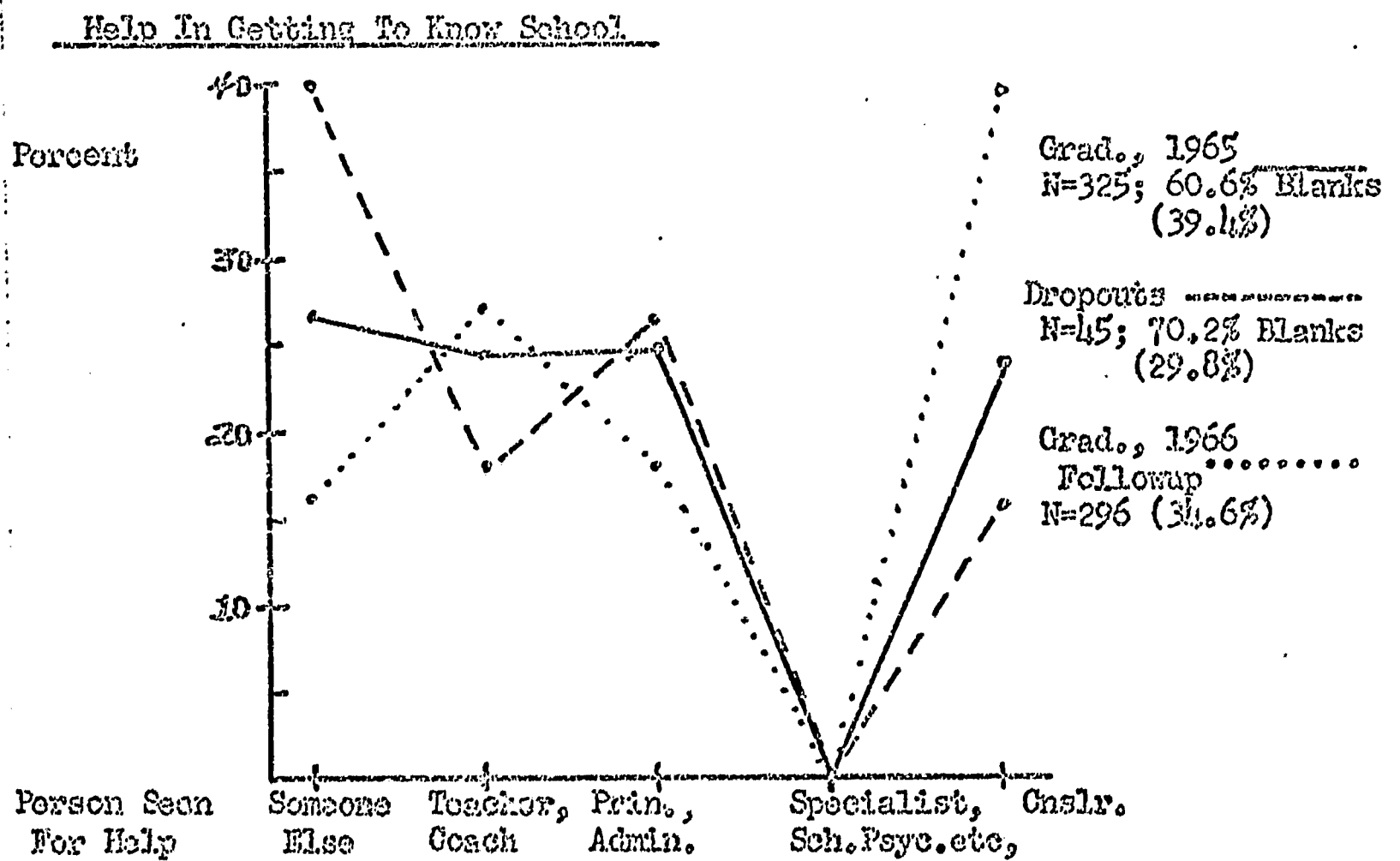


Figure 12

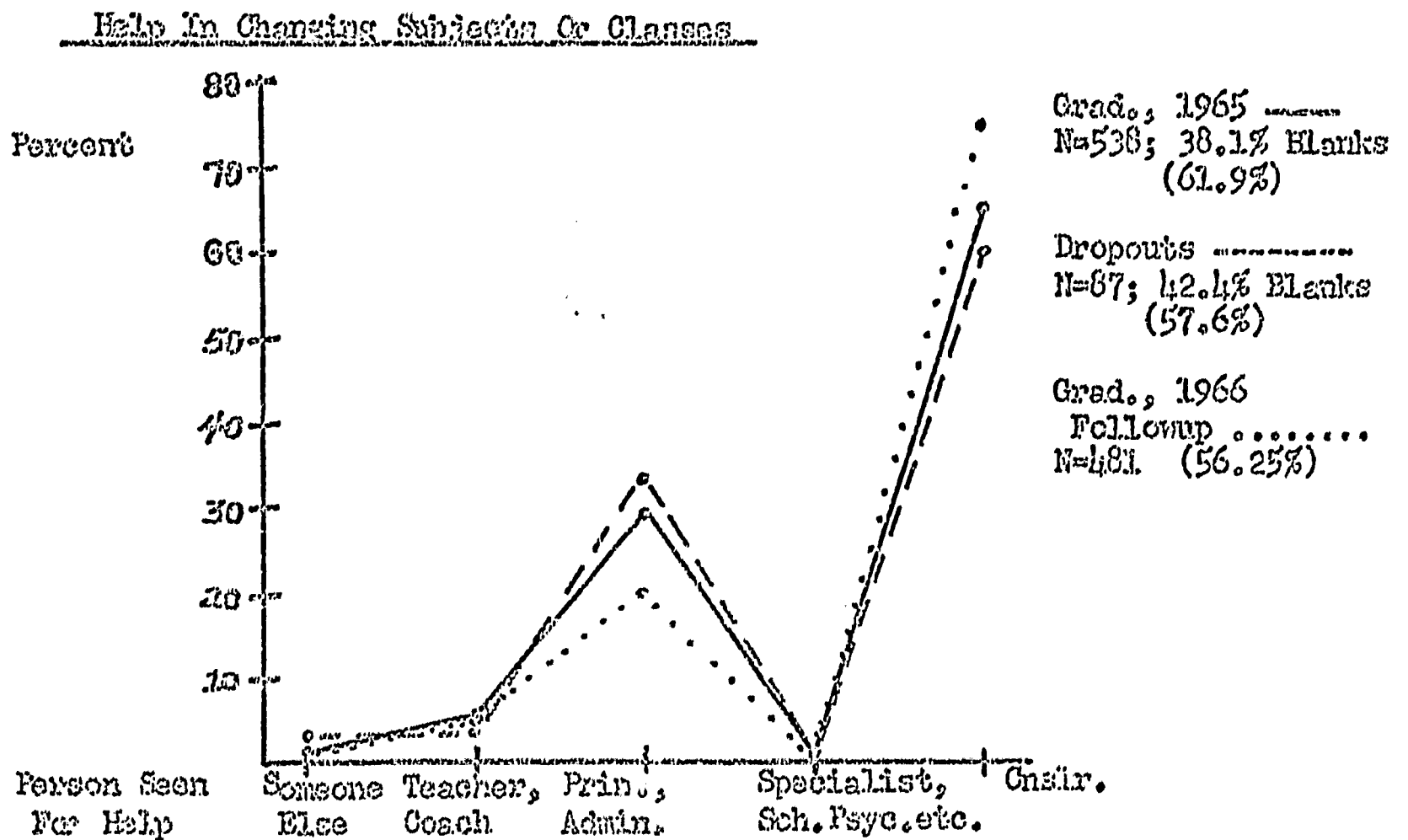


Figure 13

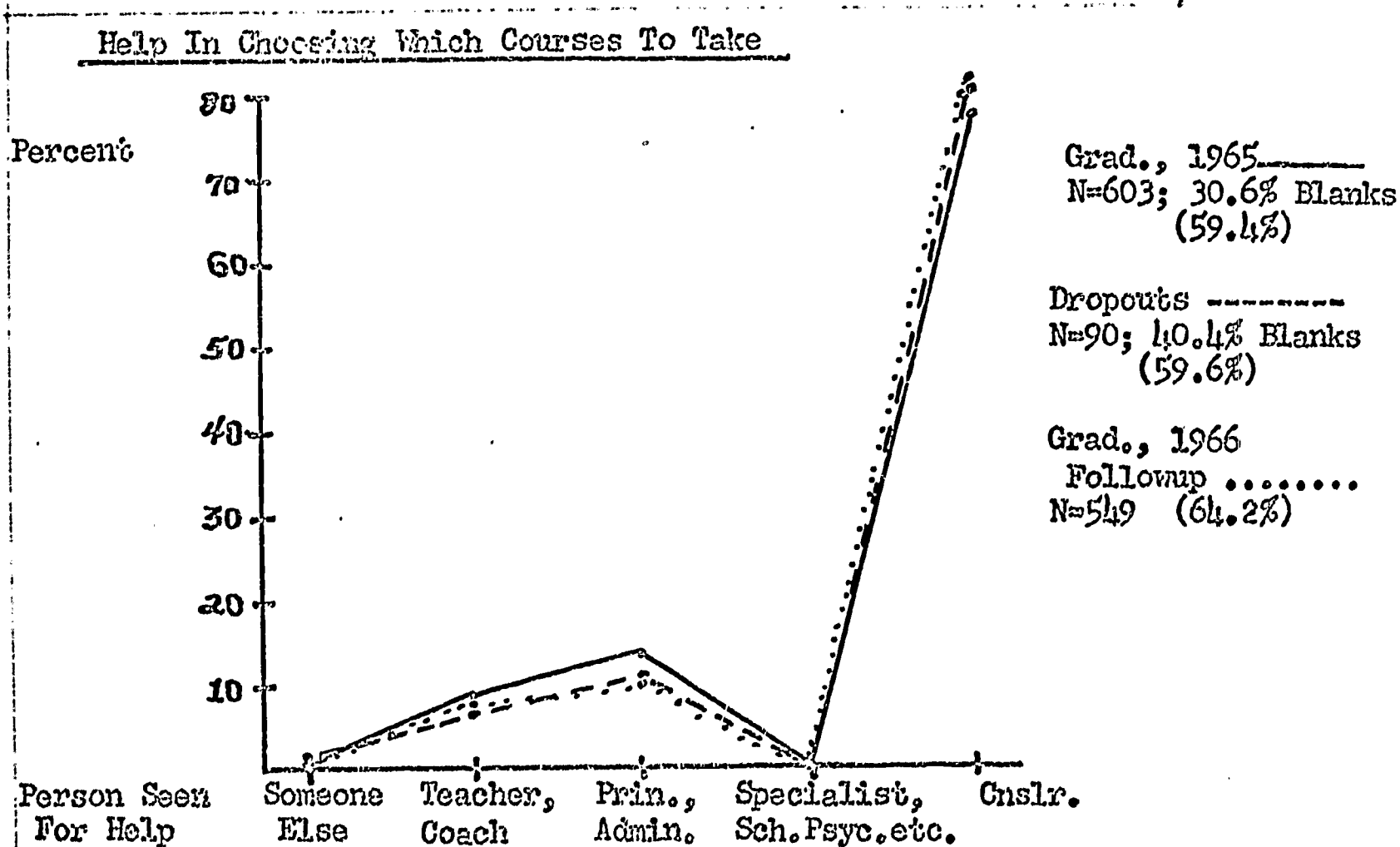


Figure 14

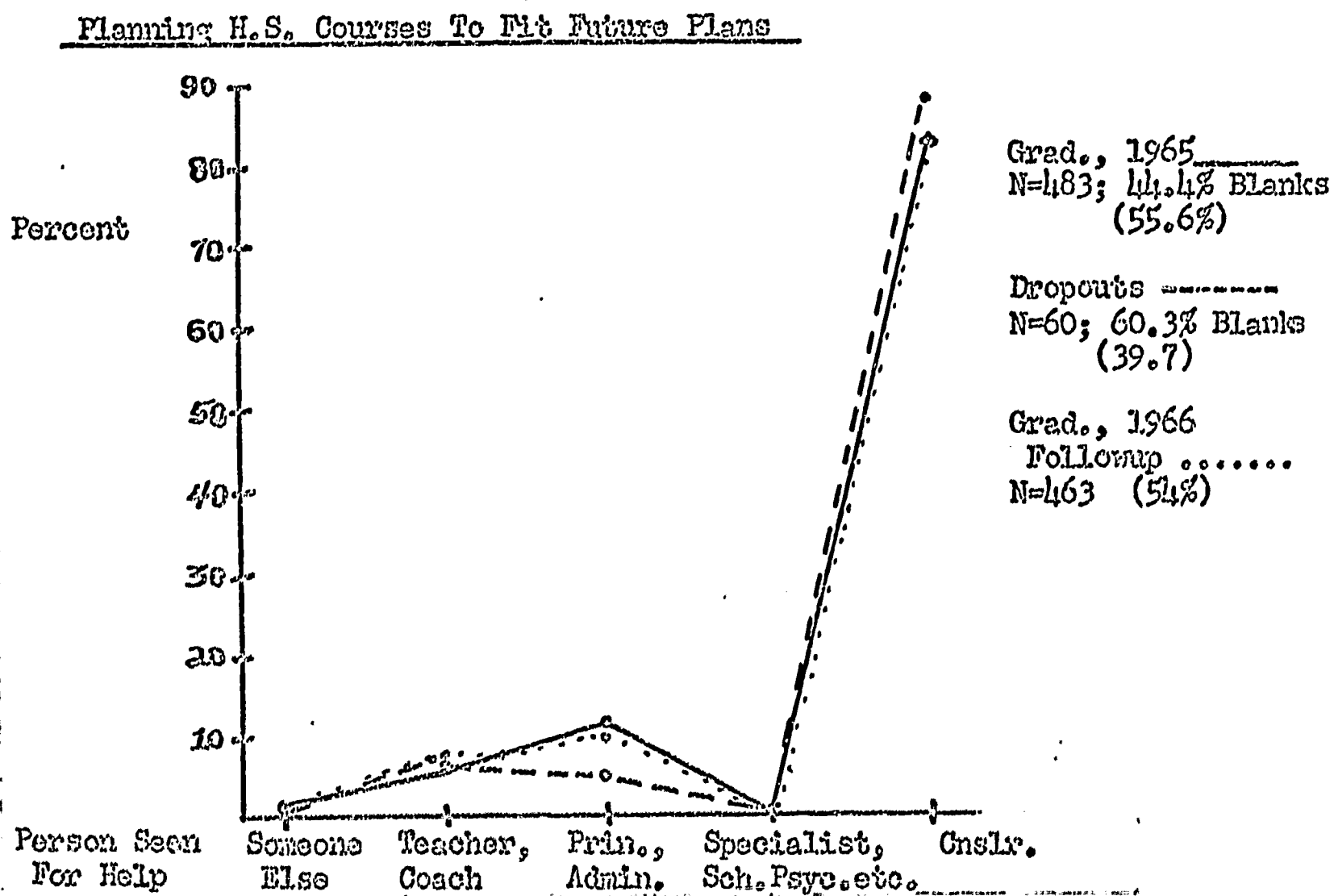


Figure 15

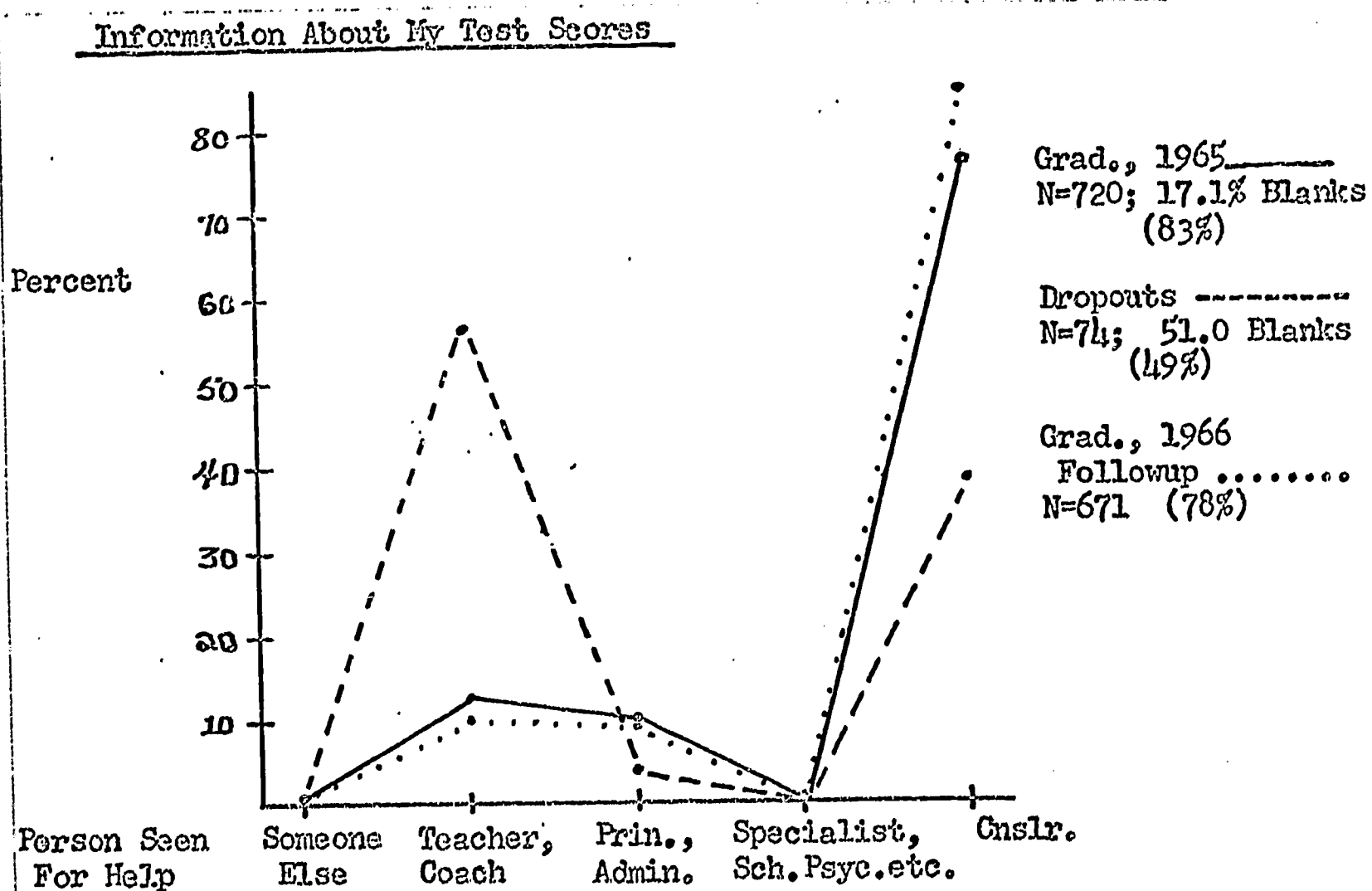


Figure 16

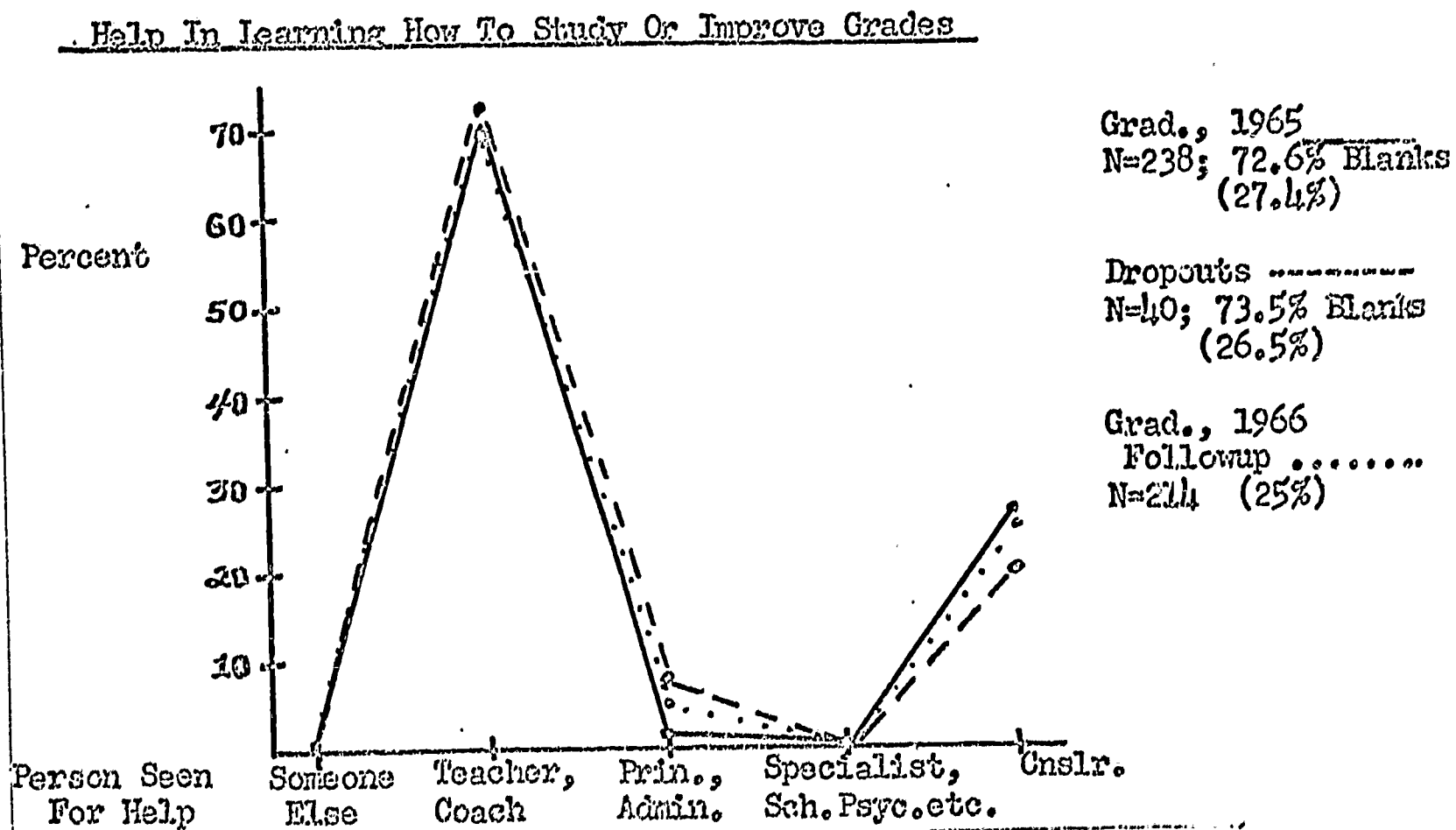


Figure 17

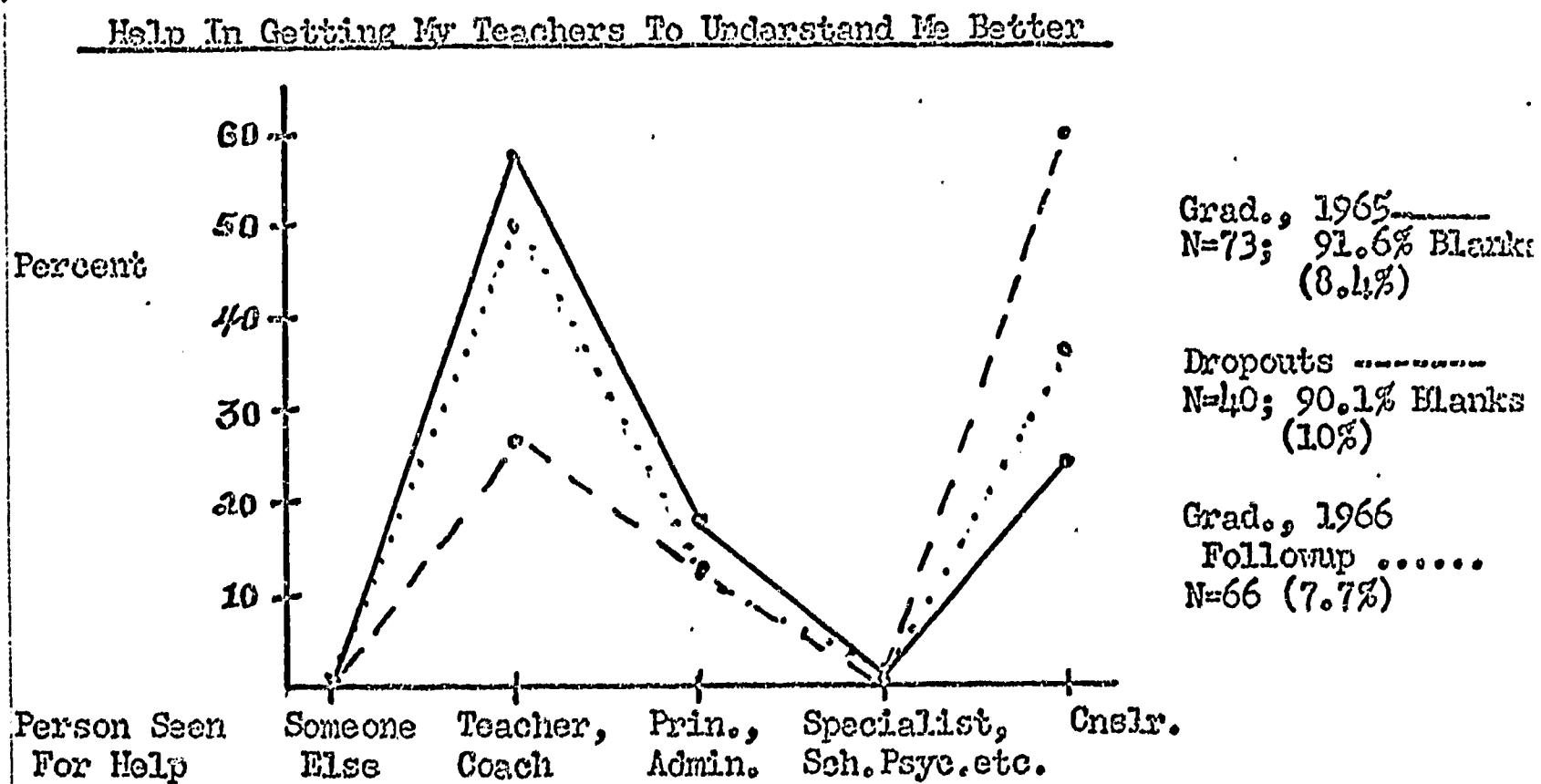


Figure 18

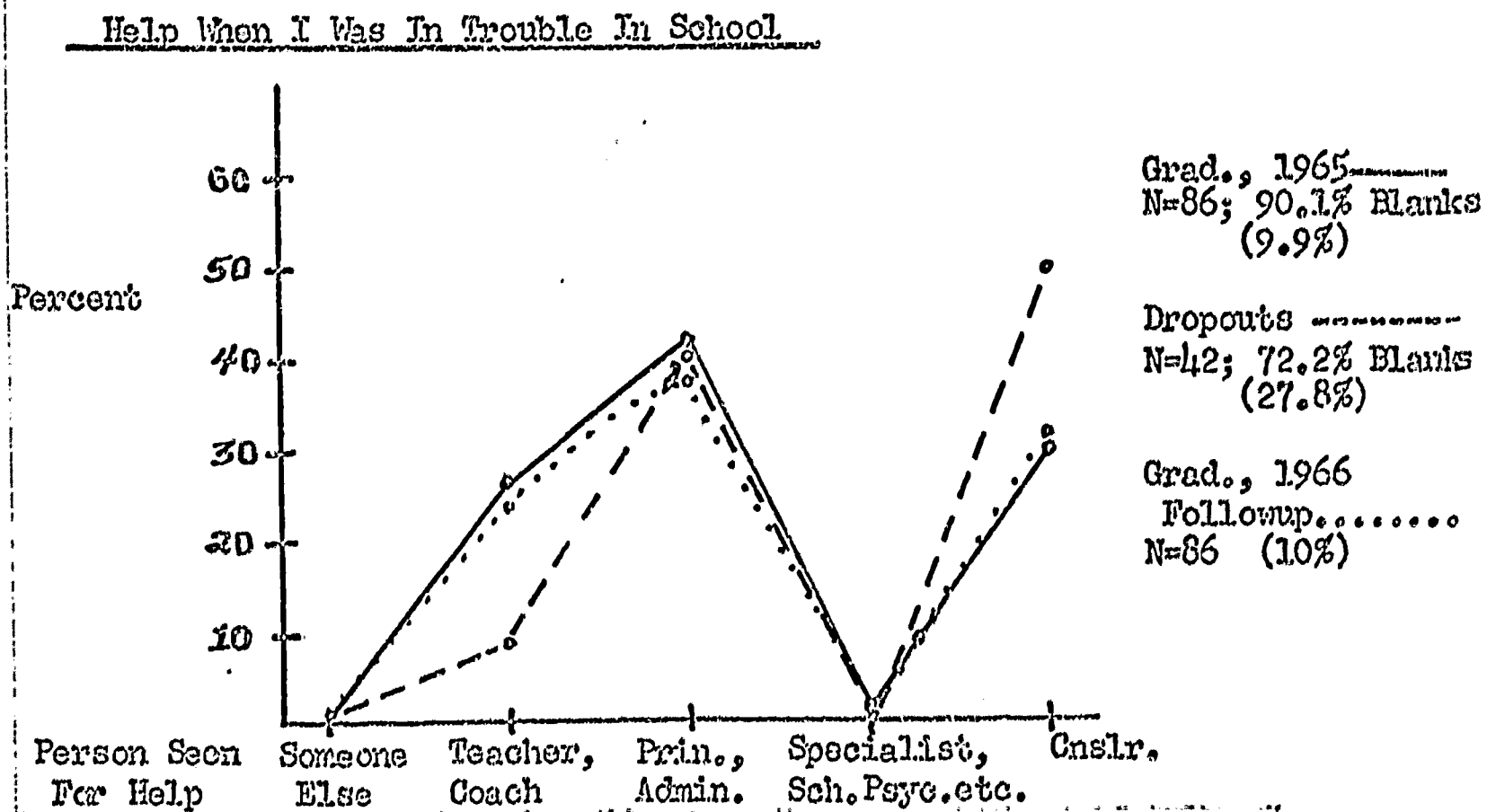


Figure 19

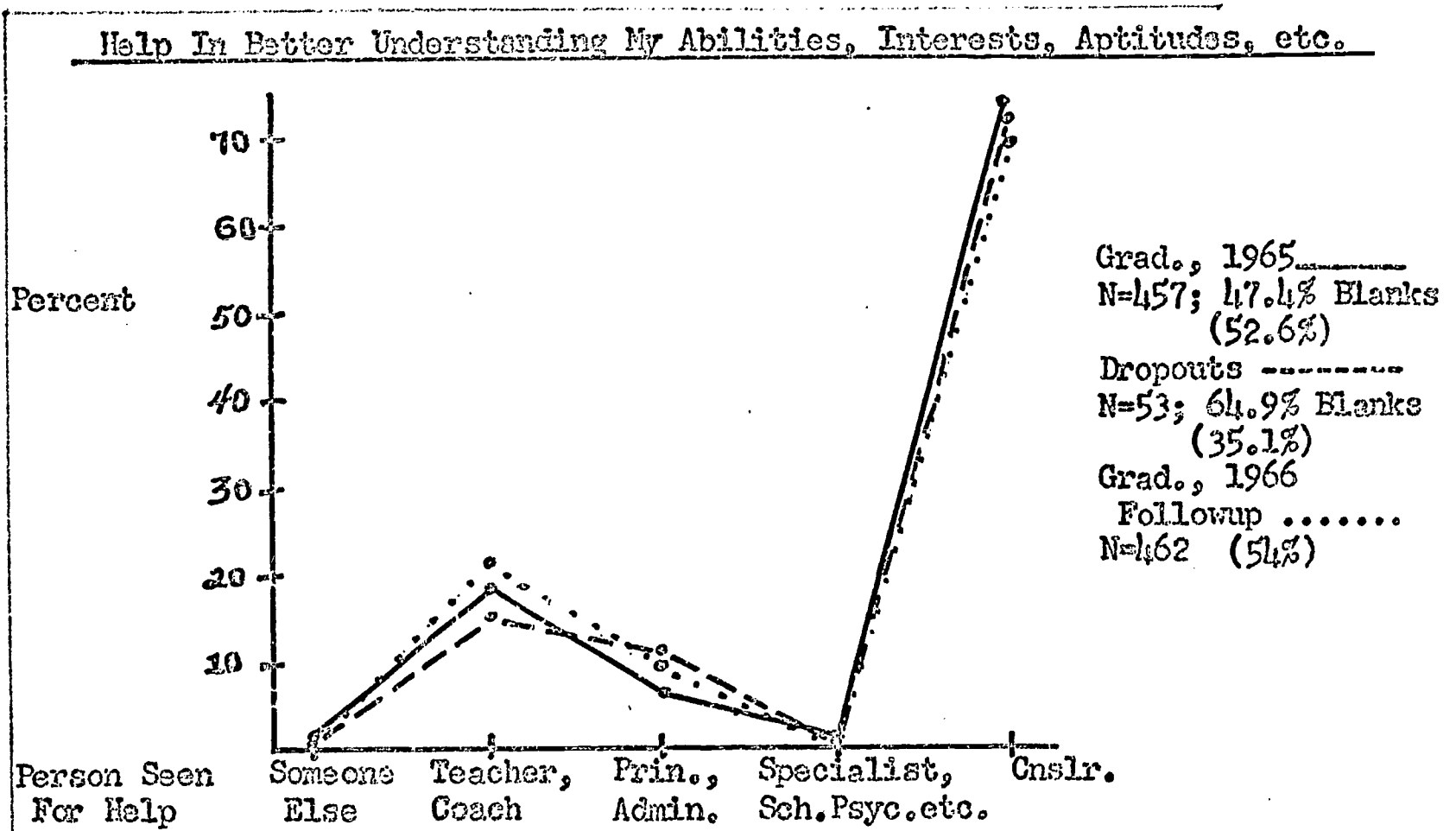


Figure 20

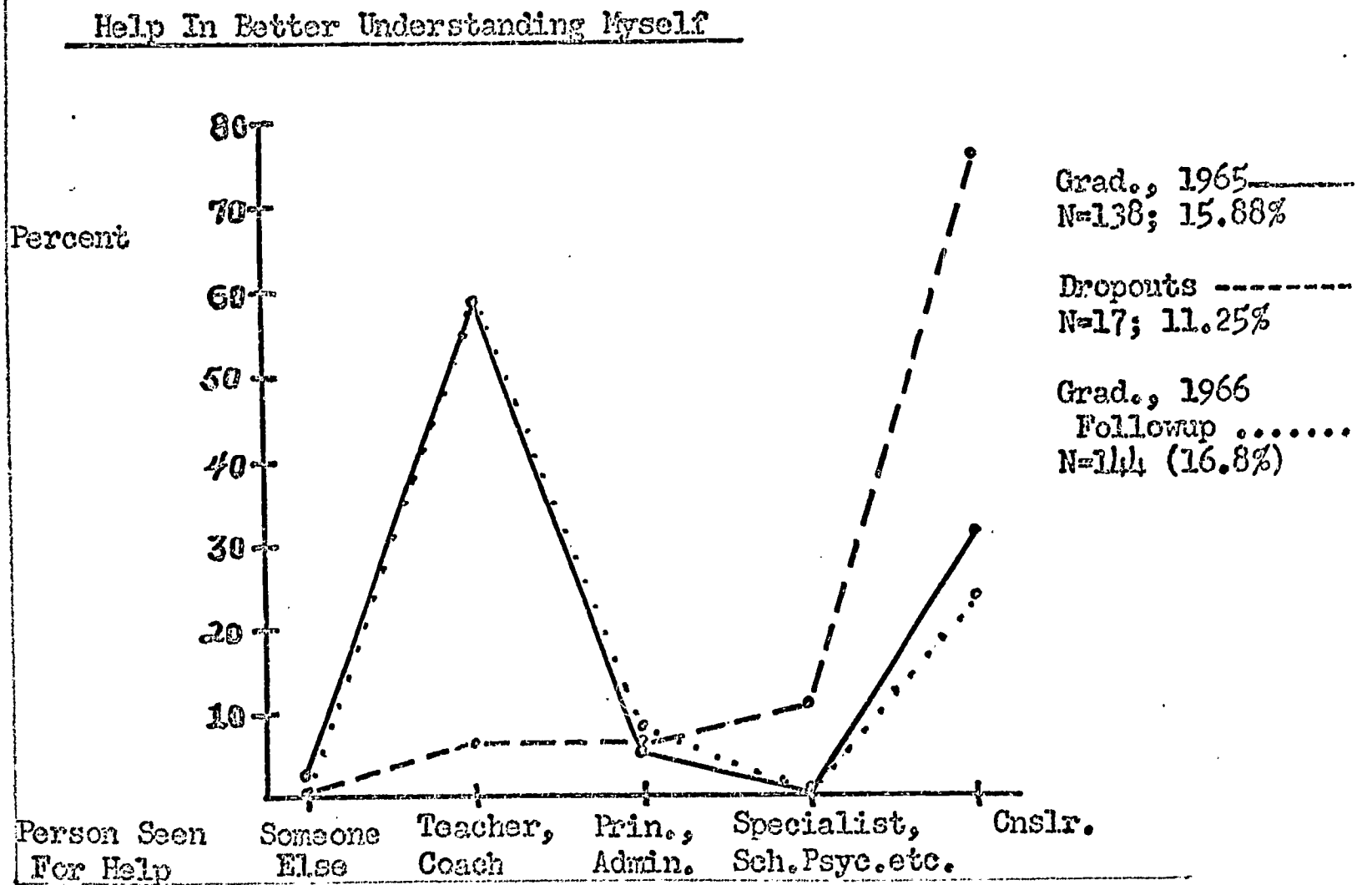


Figure 21

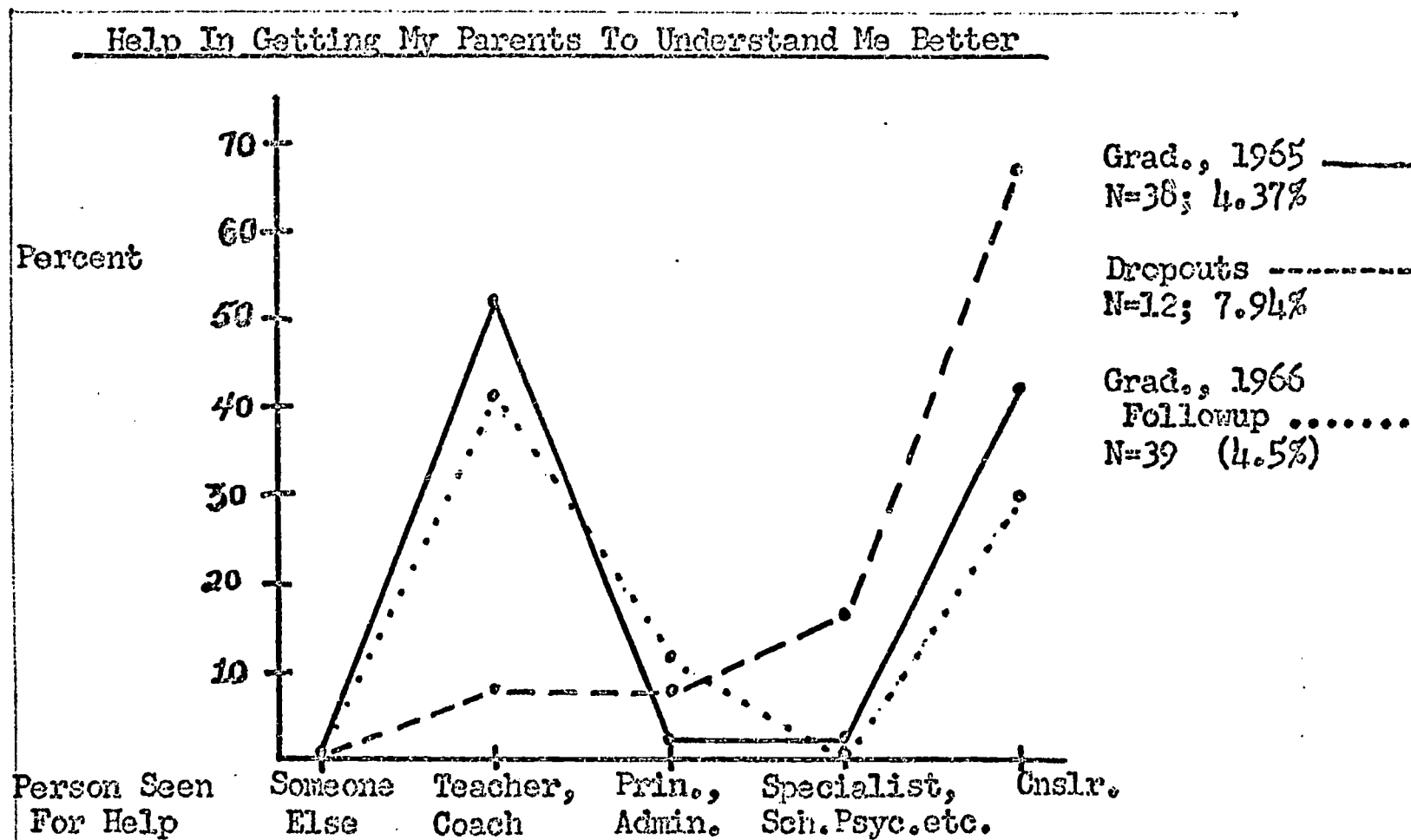


Figure 22

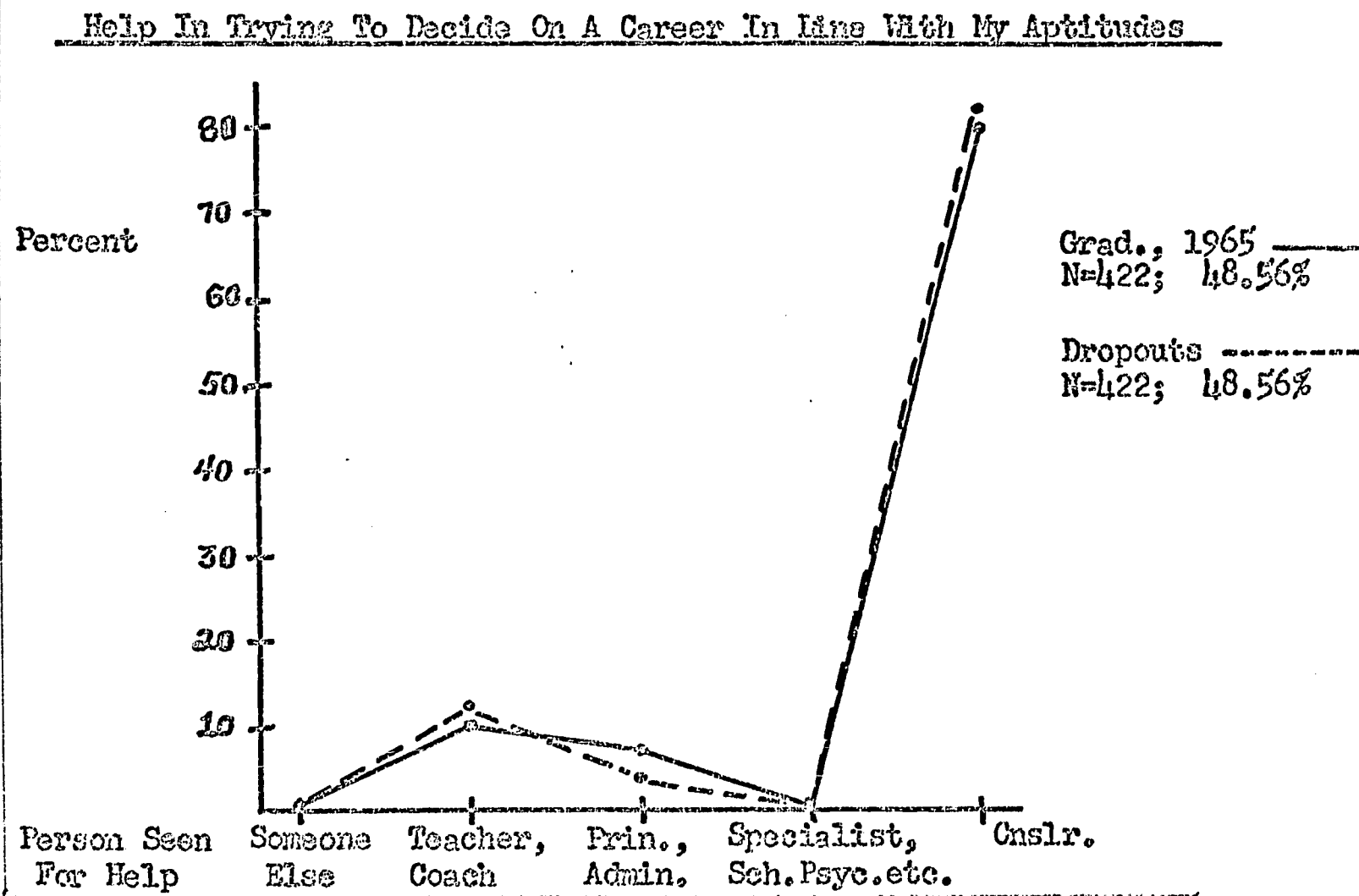


Figure 23

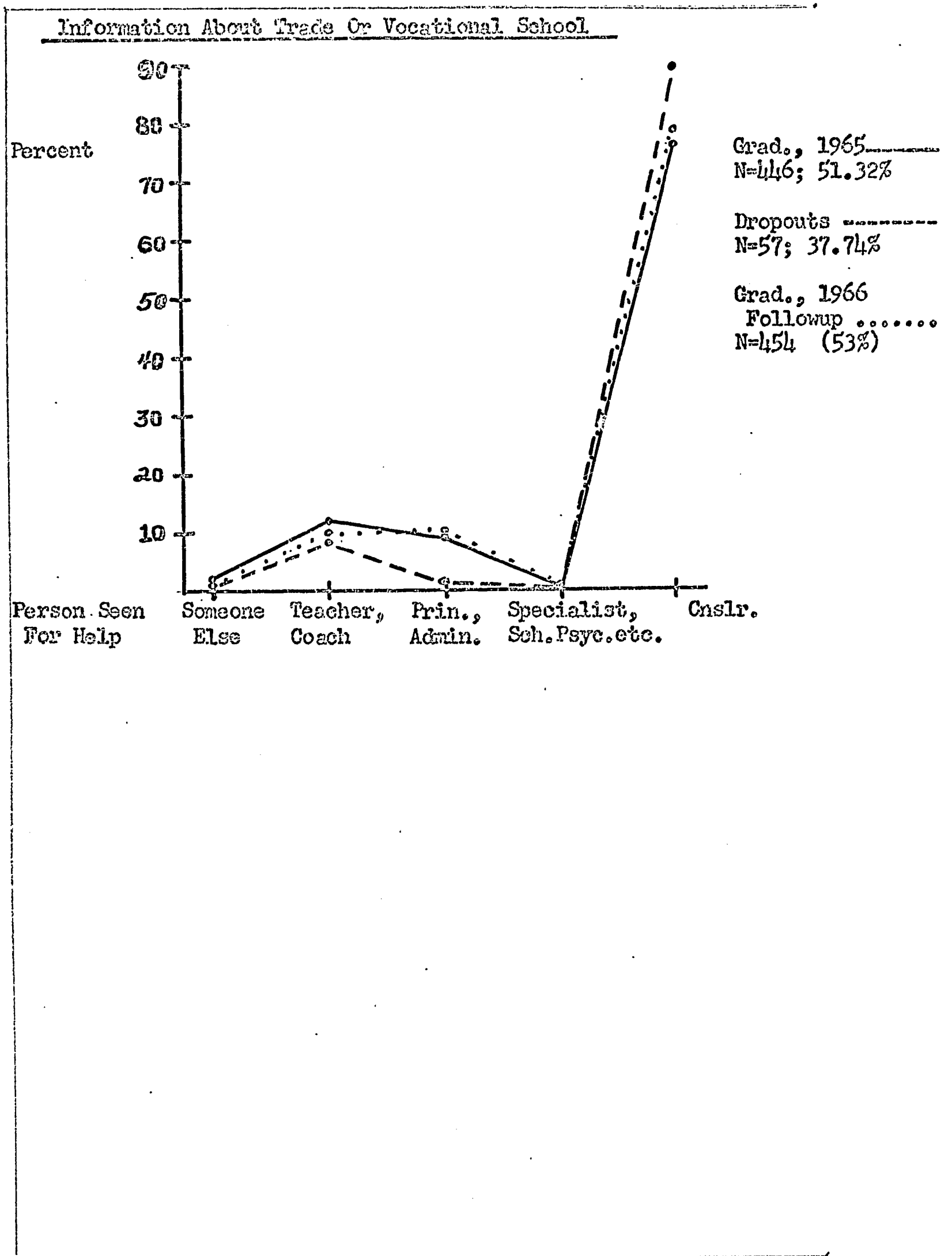


Figure 24

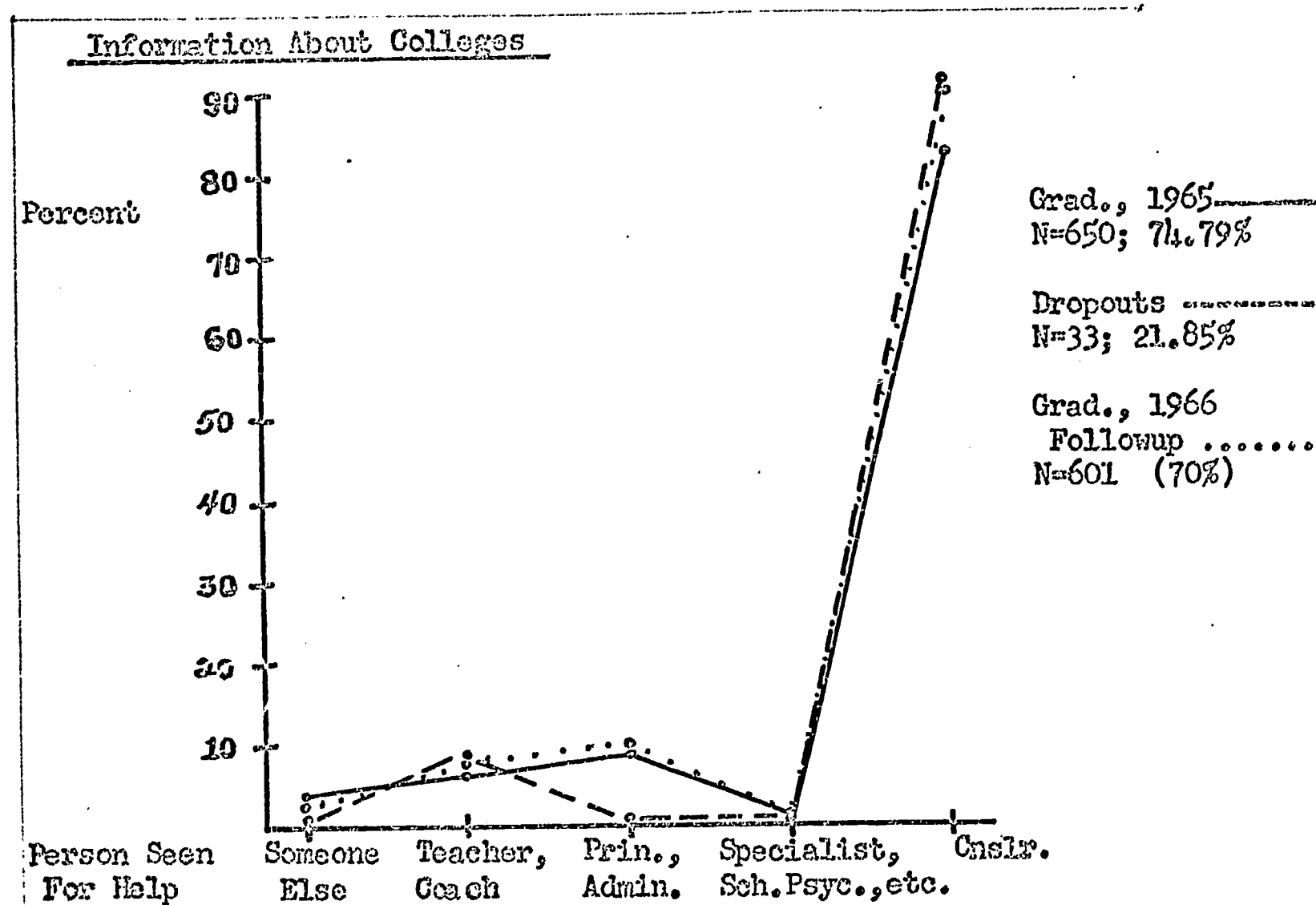


Figure 25

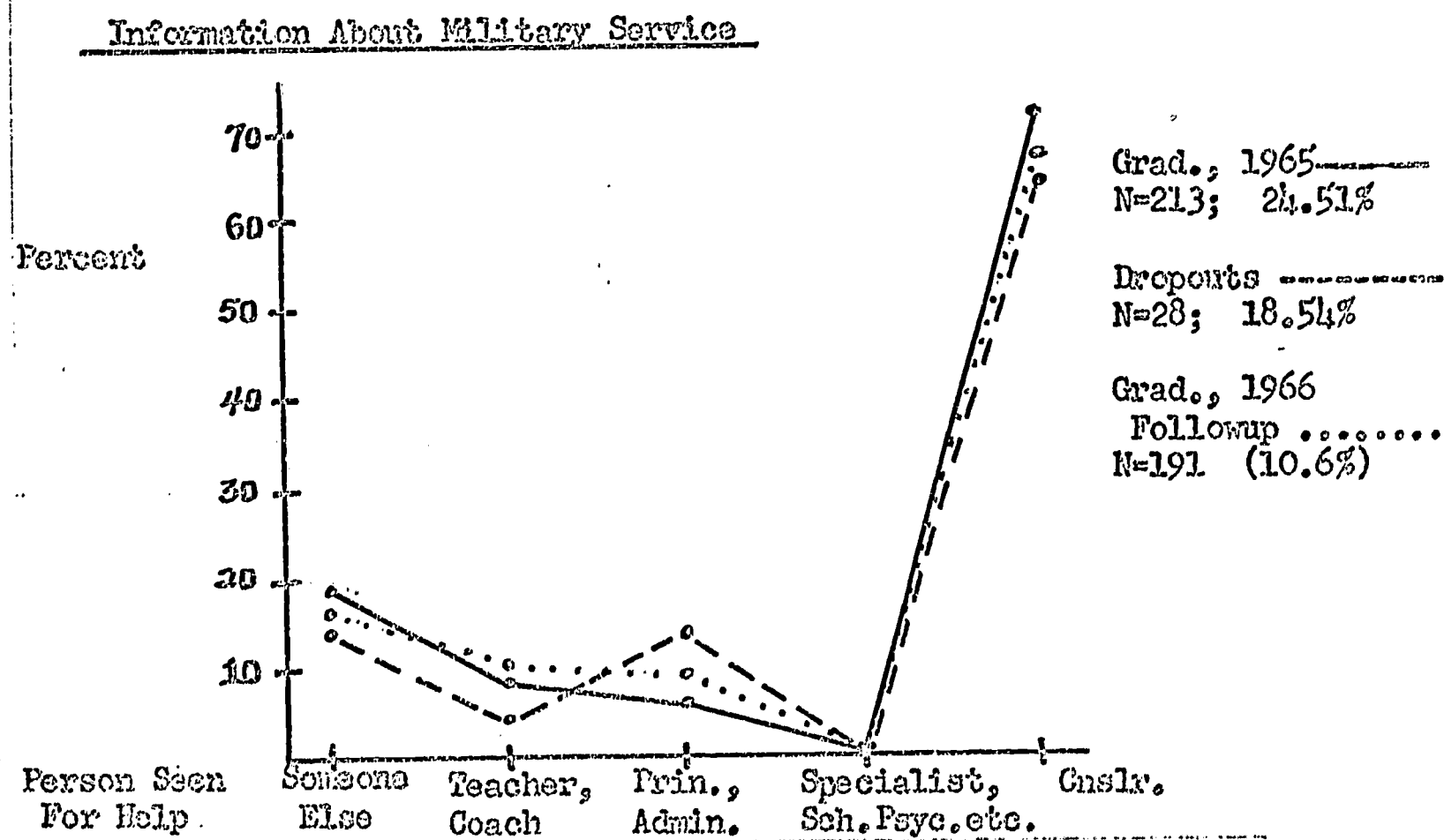


Figure 26

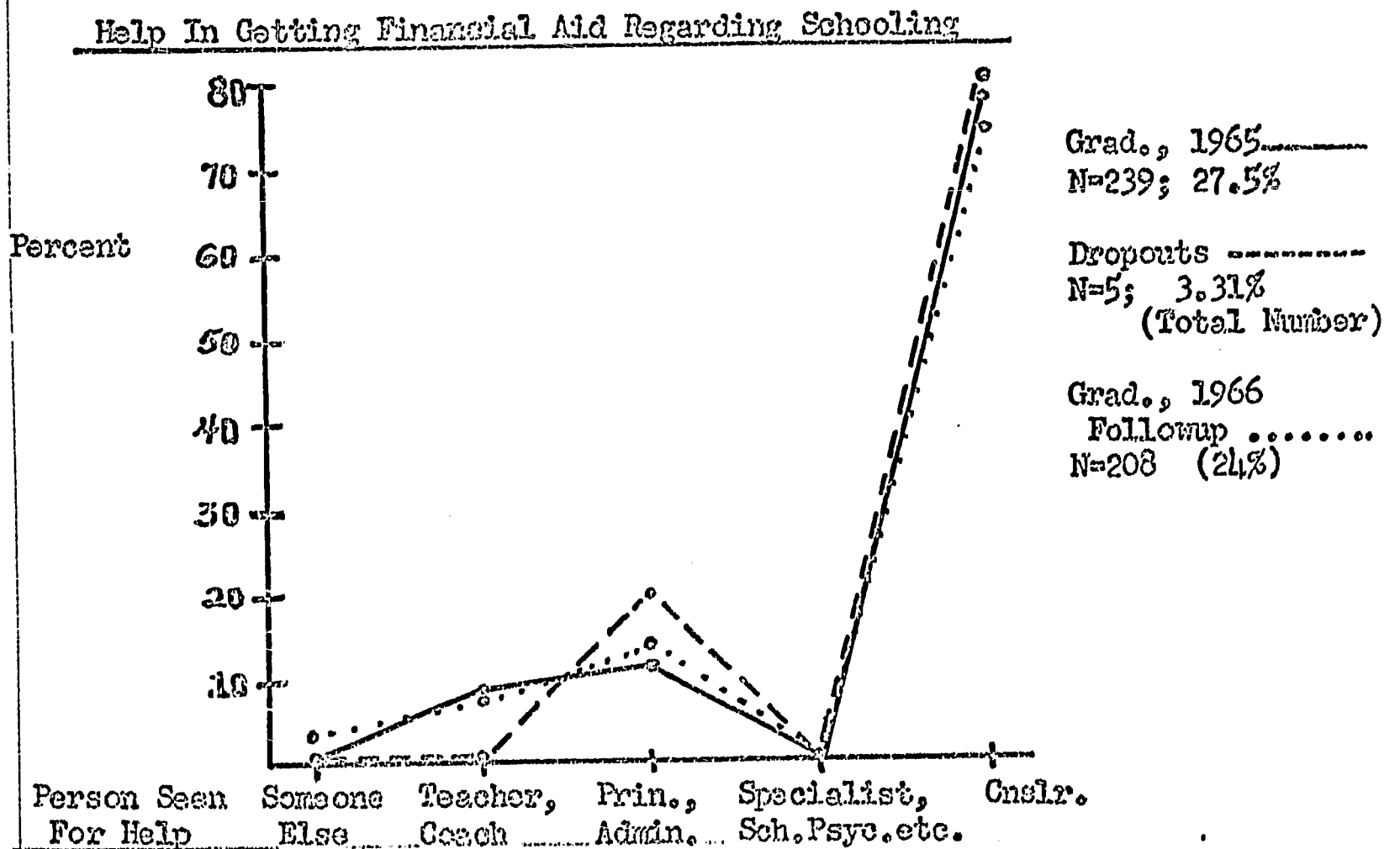
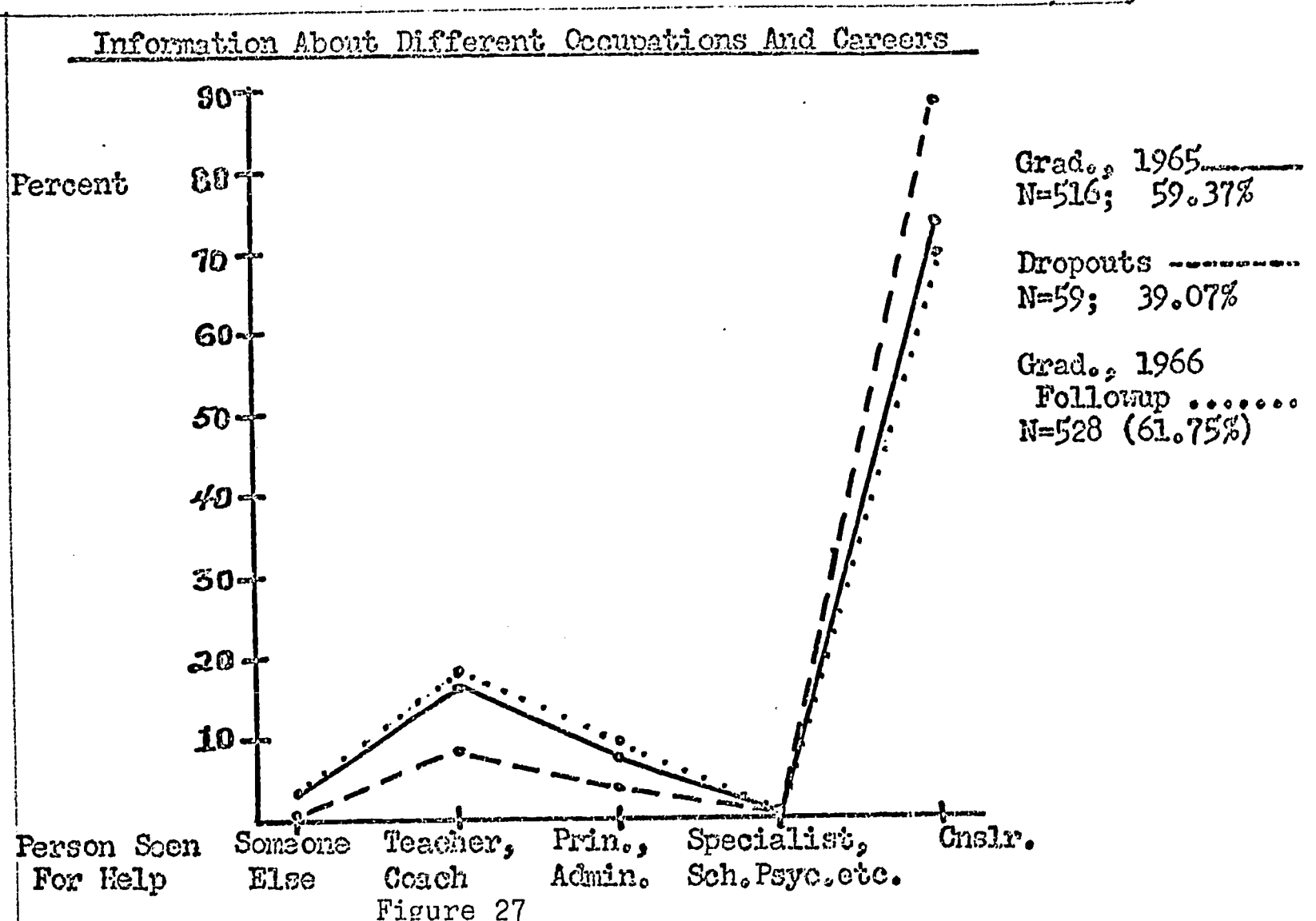


Figure 28

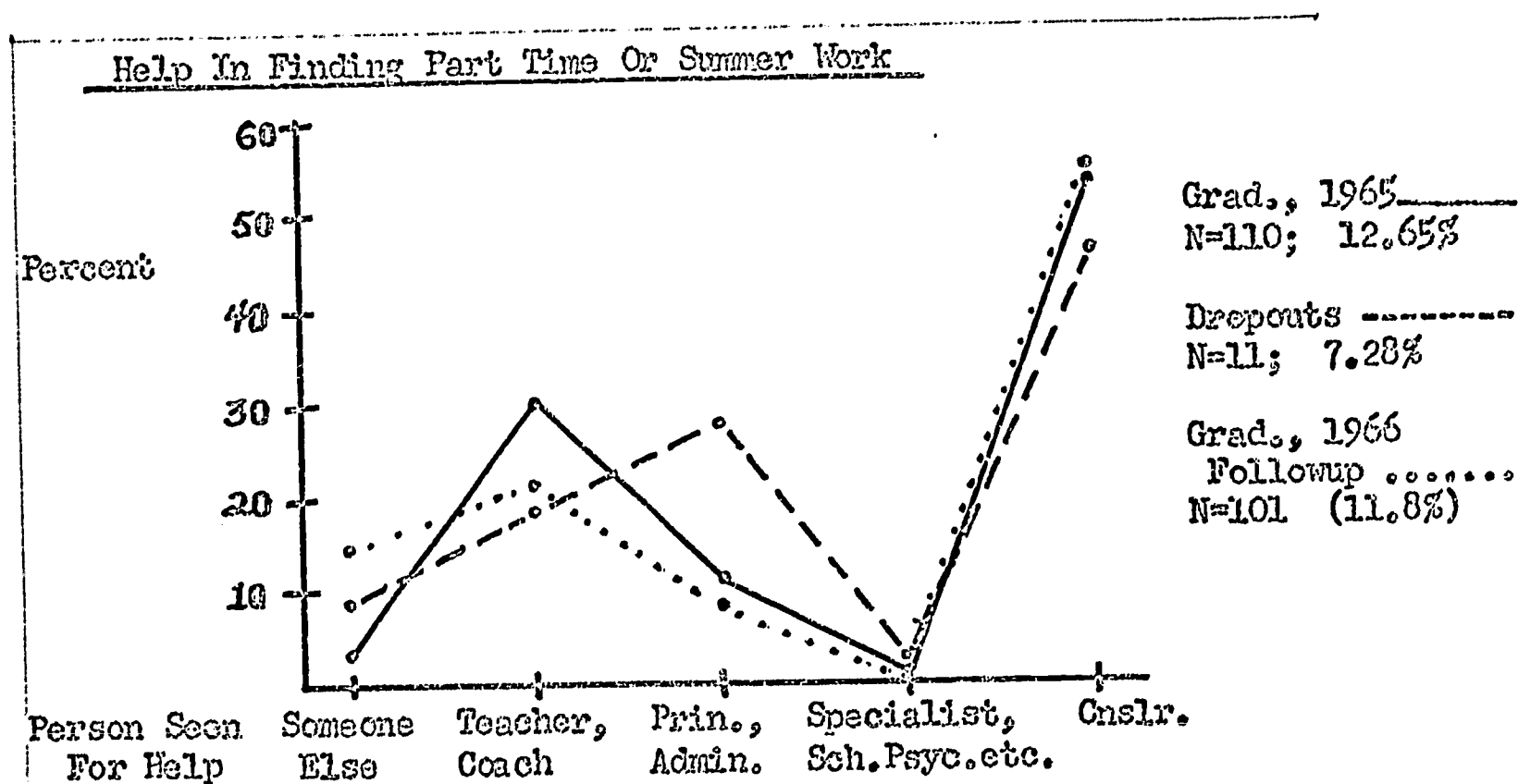


Figure 29

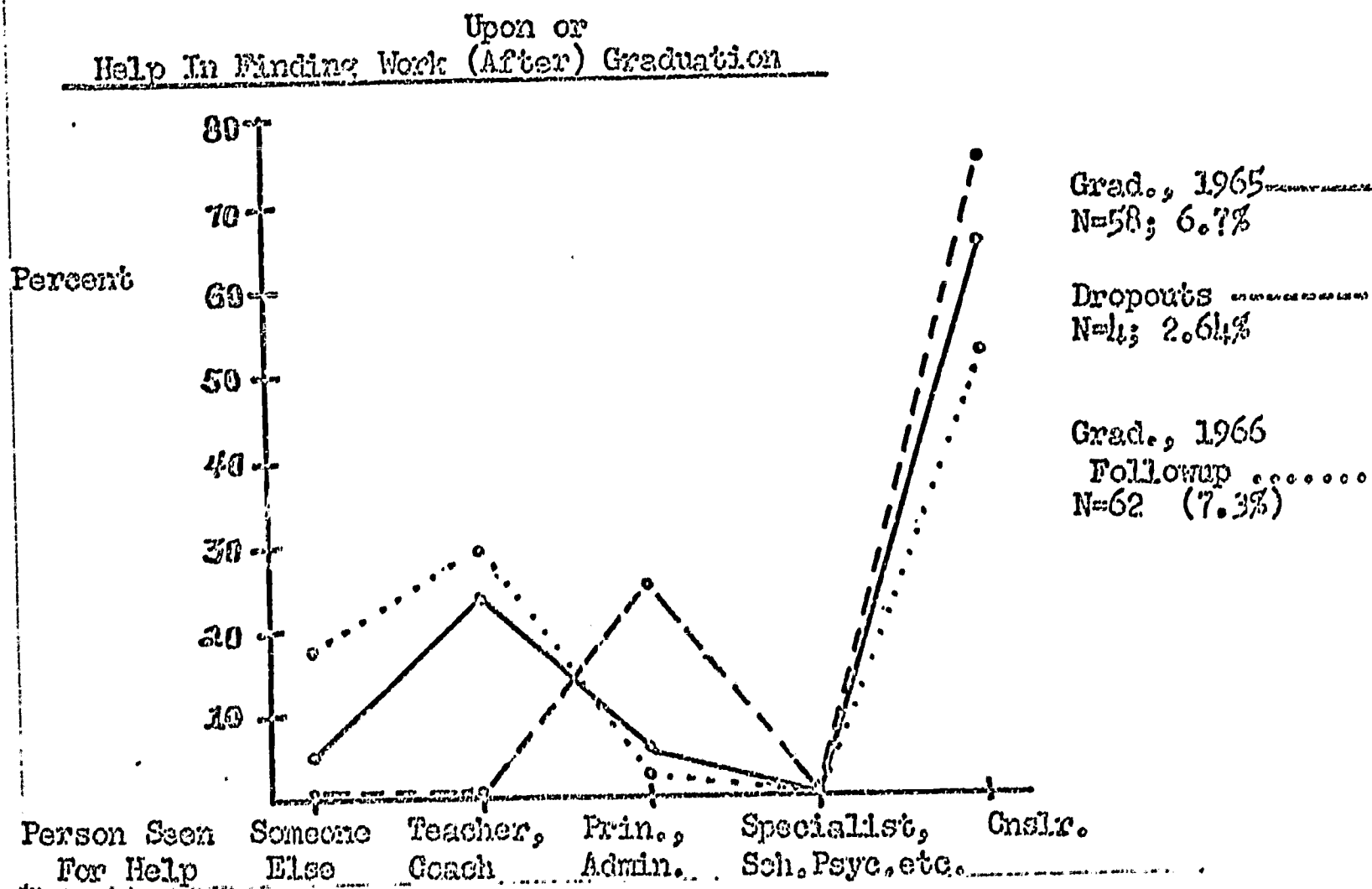


Figure 30

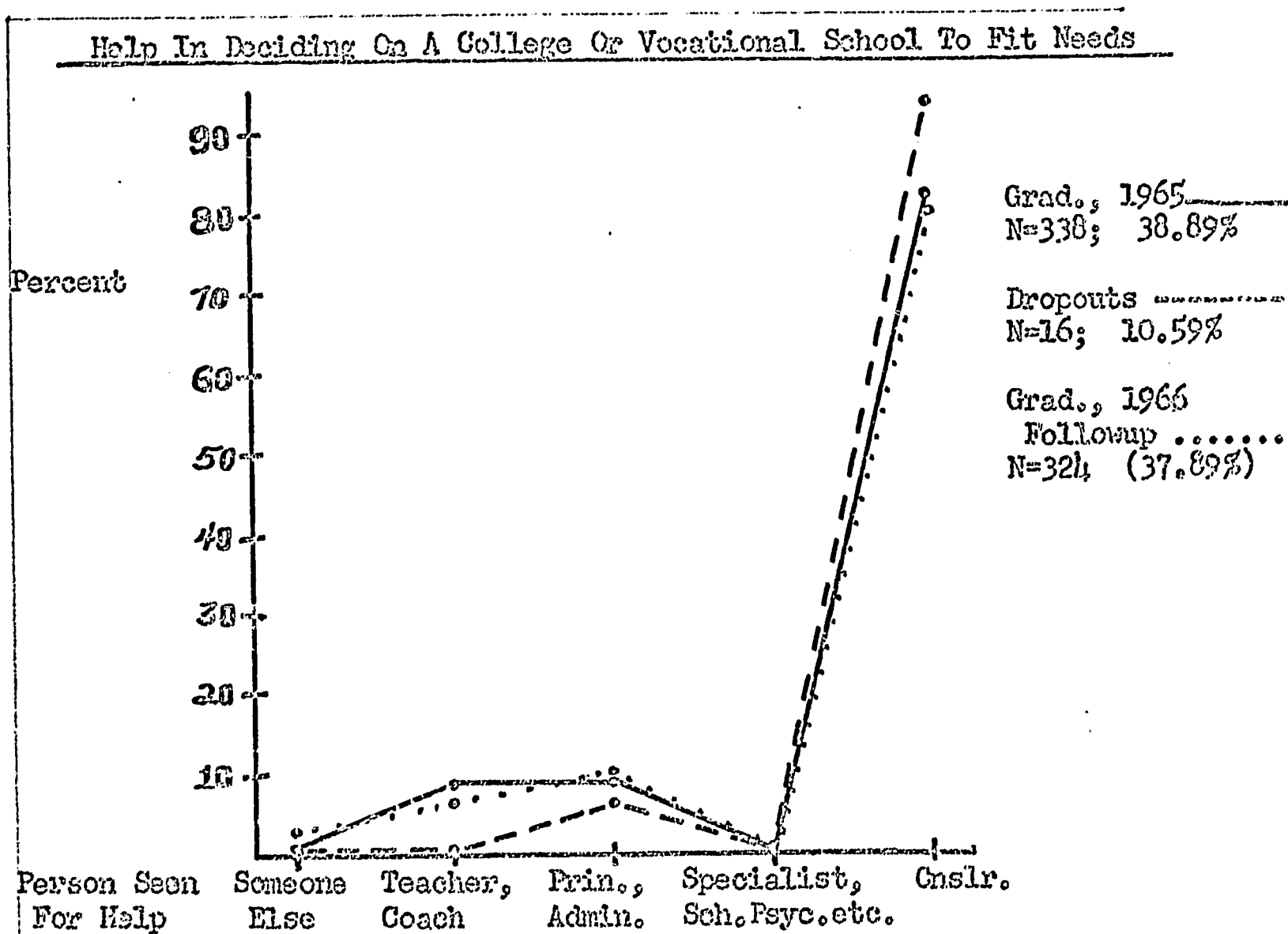
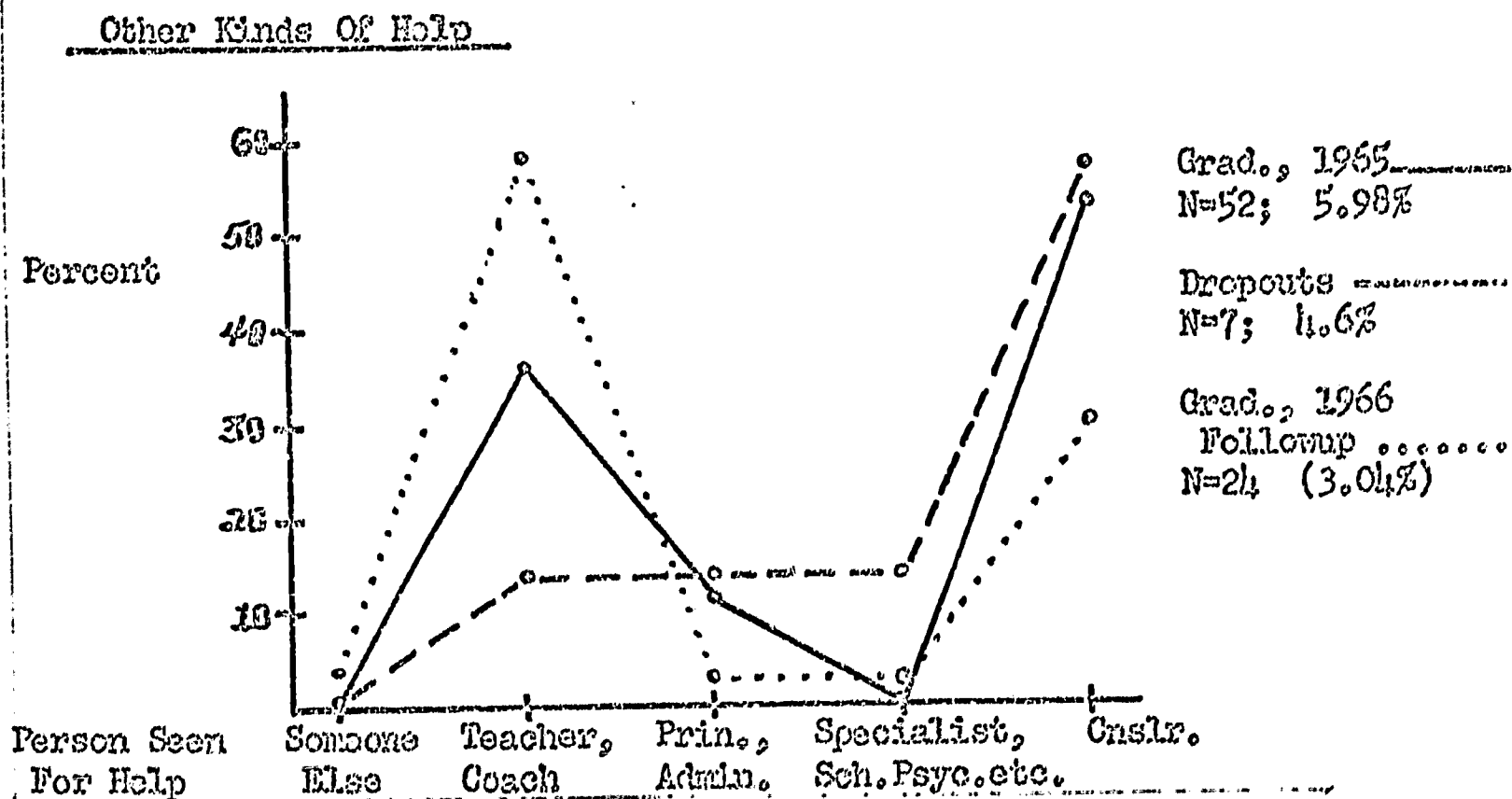


Figure 31



SUMMARY

The descriptive data reported in this chapter cover the first of two major tasks undertaken in this exploratory study. This task was to identify and measure various aspects of guidance programs. Descriptive statistics reported covered the 84 schools, 1116 seniors, 869 graduates, 155 dropouts, the counselors and guidance programs.

The information collected and reported was classified into three categories identified as "situational," "outcome" and "input" variables. The statistics reported were further broken down into subcategories including, characteristics of the schools, characteristics of the students, counselors and their activities, aspects of the guidance programs and student-counselor contacts. The tables listed provide overall comparisons of various student groups.

The next two chapters cover the actual findings in terms of how guidance programs relate to outcomes.

REFERENCES

1. Army General Classification Test. Manual. First Civilian Edition, Form AM. Chicago, Science Research Associates, 1947.
2. Dictionary of Occupation Titles. Volume II, Occupational Classification, Third Edition. U. S. Government Printing Office, Washington D. C., 20402, 1965.
3. Shartle, Carroll L. Occupational Information. Second Edition. Englewood Cliffs, New Jersey. Prentice-Hall, Inc., 1952.

Chapter 4

MAJOR RELATIONSHIPS BETWEEN OUTCOME AND PREDICTOR FACTORS

The first task undertaken in this study and reported in Chapters 2 and 3 and the appendices was the identification and measurement of three types of variables related to guidance programs in Minnesota and the students with whom they deal. The second task was to study relationships among these variables in order to test the assumption that students who have been exposed to different kinds and amounts of guidance will have attained certain desired objectives, as measured by the outcome variables, in different degrees. The results are discussed in this and the following chapters.

Intercorrelations were first obtained on all variables in the study, after removing certain clearly categorical variables (such as counselor training institution). Because of the exploratory nature of the study, an attempt was made to collect data on as many variables as was reasonable. An examination of the resulting table of intercorrelations indicated that, not only was the mass of data rather formidable and difficult to analyze, but there was enough intercorrelation among variables in any one category to suggest considerable redundancy. In order to reach a reasonable level of parsimony in presenting the results, it appeared that it would be of value to group or cluster the variables in such a way as to lose a minimum amount of information, and to search for interrelationships among these clusters.

Toward this end, the data within each of the three categories were separately factor analyzed and crude scales were developed on the basis of the factor-loading patterns.¹

¹The data processing facilities of the University Computer Center of the University of Minnesota were used in the factor analysis. The computer program was written by Lawrence Liddiard of the Computer Center staff, using Harman (6) as his primary source. The program is part of the UMSTAT library, UMSTAT55, of the CO-1604/160 complex.

The input to the program for each analysis was the corresponding matrix of product-moment correlation coefficients. The

It should be emphasized that the factor analysis here was not used in the precise manner that is necessary, for example, in attempting to extract pure factors from a number of psychological tests. In fact, it might be said that in this study the factor analysis served as an efficient type of item-analysis, for guiding the selection of variables to be combined into separate, relatively uncorrelated scales with high internal consistency. Accordingly, the factors described below are not viewed by the director as constructs in the usual sense suggested by factor titles, but rather as efficient summaries of the variables within the matrix.

Factor scores were not obtained because of the difficulty in interpretation and replication of them. Instead, a number of the variables with heaviest loadings in each factor were selected to be used in obtaining a kind of scale score for each school on that factor. Once the variables had been selected which were to be used in obtaining the score for a given factor, the raw scores on these variables were converted into z-scores. All of these z-scores for a given school were then added and the mean z-score obtained. The mean z-scores for all 84 schools then formed a new scale of scores for the given factor, and the z-score for any one school on that factor is called a scale score.

Before carrying out the factor analysis the director and assistant director studied all of the variables on which information had been gathered and removed a number of them for various reasons.

diagonal elements were replaced by communality estimates (the squared multiple correlation obtained by multiple regression of each variable on the remaining variables). The principal-factor solution was obtained using the Jacobi method (6, p. 180) which is an iterative procedure for finding eigenvalues. All rotations were orthogonal and were made by the program to the Kaiser Normal Varimax Criterion (6 : p. 301) and no hand-rotations were performed.

As a part of the standard output of the program, the Varimax rotations are performed in a step-wise fashion upon the first two principal factors, then the first three factors, and so on within a range specified by the user. For each of the three factor-analyses here, a matrix of loadings rotated to the Varimax criterion was obtained for two through ten factors.

The decision as to when to stop factoring is a difficult one, although as Harman points out, "factor analysts have developed crude guides" to help them in making the decision (6:363). One such guide reported by Harman is Kaiser's recommendation that factoring cease at the point at which the eigenvalues drop below the 1.00 level. In the present instance, since in addition to the eigenvalues, the Varimax rotations were available for up to ten factors, both kinds of information were used by the researcher in arriving at a judgment as to the number of factors to extract. That is, the rotations were examined to see how many could be interpreted in meaningful or plausible fashion.

Some were removed because the information had been obtained from two sources and one was clearly more accurate. Some scales had clearly not been interpreted in the same way by everyone. For example, the ratio of students to personnel workers other than counselors was confounded by the recent influx of workers into certain schools, financed by the "poverty bills," and there were also various ways of calculating the proportion of their time allotted to the school in question. For such reasons as these, some variables were removed; the factor analyses were carried out on the remaining ones.

Factor Analysis of Situational Variables, All Schools

Guidance efforts take place within given settings and usually accept as given certain circumstances and characteristics of students, such as family wealth and measured ability. In the present study the name "situational variables" is applied to all of these "givens," which are generally thought to be uninfluenced by guidance efforts but which may have some influence on the success of such efforts.

Twenty two situational variables were used in the factor analysis, of which 21 are shown in Table 32. The other, the principal's estimate of average income for the students' families, was dropped because it was felt that the average of the estimates of the students in the sample was more accurate. From an examination of the Varimax rotations and consideration of the eigenvalues,¹ four factors were initially selected out of the five shown in Table 32. A description of the first four factors, the variables used in determining the scale scores, and the descriptive title applied to the scores are given below.²

¹The eigenvalues for these four factors were 9.33, 1.45, 1.04, and 0.76; these factors accounted for approximately 58% of the total variance.

²As may be seen in Table 32 and the subsequent factor-loading tables, all of the heaviest loadings in certain factors are negative, indicating basically that the absence of certain variables is likely to accompany the absence of certain others, whereas the presence of one may not indicate equally strong presence of the other. Where the loadings are all negative, a high scale score indicates "lack of" or "absence of" the attribute described, and the title given the factor reflects this. Examples are "low ability" and "lack of helpfulness." Where loadings are positive, a high scale score indicates presence of or much of the attribute, and the title given the factor also reflects this. Examples are "large size" and "good holding power."

Table 32

Factor Loadings of Situational Variables

	Culturally Advan- taged Community S=4	Low Ability S=3	Large Size S=1	Academic Atmosphere S=2	
Variable	1	2	3	4	5
1. Nearness to vocational school	.805*				
2. Nearness to college	.749*				
3. Community facilities available	.585*	-.321	.420		
4. No. teachers with advanced degrees	.461*	-.447	.436		
5. Family income level	.537	-.326			
6. No. days in school year	.480		.336		
7. Ave. college aptitude		-.550*		.417	.480
8. Father's education	.437	-.597*			
9. % in college prep. program		-.614*		.335	
10. Student press for scientism		-.462		.453	
11. Size of town	.454		.668*		
12. No. of seniors	.487		.534*	.380	
13. No. subjects offered	.518		.587*	.394	
14. Teacher/pupil ratio			-.820*		
15. Ave. teacher salary	.317	-.407	.650*		
16. No. special classes			.524		
17. No. extra-curricular activities available		-.355	.519	.397	
18. Facilities available to students			.449		
19. Types of achievement recognition			.458		
20. Student press for intellectualism-competition				.664*	
21. School press for estheticism-humanism				.684*	

*Indicates variables used in calculating scale scores for each factor.

Factor S-1, Large Size. This factor, shown in Column 3 of Table 32, after rotation accounted for more of the total variance than did any other factor. Harman (6:177) suggests a procedure for arriving at a rough estimate of the standard error of factor coefficients. Using this procedure, coefficients as high as .320 would be significant at the .01 level in this matrix. All such coefficients are shown in Table 32.

Most of the heaviest loadings in this factor came from variables that unequivocally spell large size--of the school and the community in which it is located. These include: size of town, size of senior class, number of subjects offered, number of special classes, number of extra-curricular activities available, and number of school and community facilities available to students. This type of school also has a high teacher-pupil ratio, high teacher salaries, more teachers with advanced degrees, more days in the school year, and more types of achievement recognition. Variables numbered 11 to 15 in Table 32 were actually used in calculating a scale score for this factor.

Factor S-2, Academic Atmosphere. This factor, shown in column 4 on Table 32, requires special explanation, since the major loadings come from sub-scores of the instrument entitled "What Your School Is Like." (Appendix B, p. 27) These subscales were developed by McDill (7) as measures of school climate. Some of McDill's subscales were combined to form a total of nine subscales. The subscales and the questionnaire items in each were:

1. Faculty press for enthusiasm-directiveness (1-3)
2. Student press for social conformity (4-5)
3. Faculty press for scientism (6-9)
4. Student press for scientism (10-13)
5. Faculty press for vocationalism (14-15)
6. Student press for intellectualism-competition (16-22)
7. Faculty press for intellectualism-achievement (23-29)
8. Faculty press for supportiveness, affiliation, independence (30-37)
9. High school (student and faculty) press for estheticism-humanism (38-46)

Only scales 4, 6, and 9 had statistically significant correlations with several of the outcome measures, and these three were used in the factor analysis.

Using his scales of school climate plus other measures, McDill extracted six factors of high school climate, three of which depend heavily on the items that are also found in subscales 4, 6, and 9 above. These three factors extracted by McDill were: absence of scientism, humanistic excellence, and absence of academic emulation. A fourth, absence of intellectualism-estheticism, has elements of scales 6 and 9 above. McDill found that his short scales had satisfactory

reliabilities, and that the correlation between student and teacher scales was generally very high (7:III29-37). In summary, McDill (7:V41) reports that "--it is concluded that the individual's academic behavior is influenced not only by the motivating forces of his home environment, scholastic ability, and value orientations, but also by the pressures applied by other participants in the school setting. More specifically, in those schools where academic competition, achievement, intellectualism and subject-matter competence are demonstrated and emphasized by faculty and other students (both at the global and more immediate, interpersonal levels), individual students tend to adopt these scholastic norms, resulting in higher achievement, educational aspirations, and intellectual values on their part."

Returning now to the factor entitled "academic atmosphere," it is evident that the major loadings for this factor come from the subscales entitled "student press for intellectualism-competition" and "high school press for estheticism-humanism." Other variables loading significantly into this factor and supporting the interpretation of high academic atmosphere are "student press for scientism," "academic ability," and "percent in college preparatory programs." From other variables with loadings in this factor here appears to be some relationship between academic atmosphere and size, but not much.

Factor S-3, Low Ability. This factor, shown in column 2 of Table 32, is composed primarily of negative loadings from the variables entitled "average scholastic aptitude," "father's education," and "percent in college preparatory programs," with considerable negative loading also from the subscale "student press for scientism." The other variables loading into this factor indicate that "low ability" schools also tend to have teachers with low salary and few advanced degrees, students with low family incomes, and relatively few community facilities and school activities. Only the variables with loadings over .500 were used in calculating scale scores.

Factor S-4, Culturally Advantaged Community. This factor, column 1 in the table, after rotation accounted for more total variance than any other factor except large size. The variables loading most heavily on this factor and used in calculating scale scores for it were "nearness to college," "nearness to vocational school," "number of community cultural facilities available," "percent of teachers with advanced degrees," and "family income level." This type of school also has better teacher salaries, more days in the school year, more subjects, better educated parents; it tends to be located in or near large metropolitan centers.

The fifth column in Table 33 had one significant but secondary loading, from the variable "college aptitude;" there seemed to be no independent meaning to this "factor" that could be ascertained.

However, an examination of the remaining available Varimax matrices with over five factors indicated that, upon further factoring, the variables numbered 1 and 2 in Table 32 separate out of Factor S-4 and become the only major loadings in a new factor. Similarly, variables 5 and 6 separate out of factors S-1 and S-4 and become the major loadings in still another factor. Recognizing that these new "factors" represent in part the residuals of more basic factors, they nevertheless seemed to represent important "givens" related to guidance, and scale scores were calculated for them.

Factor S-5, Proximity to Post-High Training. Loadings on this factor were from variables 1 and 2, nearness to college and to vocation school.

Factor S-6, Advantaged Family. Loadings on this factor were from variables 5 and 8, family income level and father's educational level.

Scale scores were obtained for each factor as explained earlier, and the intercorrelations of these scores are shown in Table 33. It is evident from an examination of Table 33 that the scale scores are not uncorrelated; nevertheless there is enough independent variance to make it reasonable to use all of them in further analysis.

In summary, the clusters of situational variables selected by means of factor analysis, for the purpose of seeing how they relate to outcomes, are as follows:

S-1, Large size of school and community, with all of the advantages that go with size, such as facilities, special classes, activities. Large size is related to all of the other factors; it appears to go along with community cultural advantage in particular.

S-2, Academic atmosphere--an atmosphere in which there is press from both faculty and peers for academic and humanistic excellence, where scholarship, intellectualism, competition, humanism are felt to be important. This variable is most independent of the others, but does tend to go along with large size and relates negatively to low ability.

S-3, Low Ability--schools characterized by students with relatively low scholastic aptitude, having parents with little education (and income) with few students taking college preparatory work. (and, incidentally, with less well prepared and paid teachers). This variable is negatively related to all of the others, most particularly to advantaged family.

S-4, Culturally advantaged community--a community and school with all of the advantages--money, accessibility of post-high education, community cultural, educational and recreational facilities, better prepared teachers and a longer school year. This factor is, of course, highly related to S-5 and S-6, which are partially drawn from it, but also to S-1, large size.

S-5, Proximity to post-high training--an aspect of S-4, but with specific meaning related to guidance; accessibility of training is generally considered important, especially for the less economically advantaged.

S-6, Advantaged family--high education and income. Related to S-3 (inversely) and to S-4, but again a factor important in its own right in the guidance picture.

Table 33

Intercorrelations of Scale Scores for
Situational Factors

Factor	S-1	S-2	S-3	S-4	S-5	S-6
Large Size S-1	---	.44	-.57	.74	.58	.53
Academic Atmosphere S-2	.44	---	-.47	.39	.28	.22
Low Ability S-3	-.57	-.47	---	-.55	-.34	-.71
Culturally Advantaged Community S-4	.74	.39	-.55	---	.88	.76
Proximity to Post- High Training S-5	.58	.28	-.34	.88	---	.51
Advantaged Family S-6	.53	.22	-.71	.76	.51	---

All correlations are significant at .05 level; correlations over .27 are significant at .01 level.

Factor Analysis of Input Variables, All Schools

Thirty two input variables were used in the factor analysis; the rest were dropped for the kinds of reasons given earlier. Using Harman's procedure, it was estimated that factor coefficients larger than .460 would be significant at the .01 level, and all such coefficients are shown in Table 34.¹ A number of lower coefficients are also given in the table in parentheses, for two reasons. First, where factors are defined by only two or three variables, some lower coefficients (down to .200) are given to provide a somewhat more complete picture of the variables loading into such factors. Second, it is widely held that student-counselor ratio, financial support, and longevity are important attributes defining good guidance programs; therefore all of the loadings of these variables were put in to permit the reader to observe their distribution among the factors.

The factors that were extracted appear to fall into three categories. The first four receive their loadings from variables which describe or refer to guidance activities and functions. The fifth refers to the way the counselor is perceived. The last three relate to the setting--support, adequacy, and time in existence.

¹There were six eigenvalues greater than one in the principal factor matrix; these values were: 7.19, 2.41, 1.85, 1.59, and 1.35, and 1.31. These six factors accounted for a little over 49% of the total variance.

Table 34

Factor Loadings of Input Variables

	Low Level of Guidance Activity I-1	Problem Oriented Counseling I-2	Superficial Student-Counselor Contacts I-3	Emphasis on Non-Guidance Activities I-4	Good Counselor Image I-5	Discontented Counselor, Unimproved Program I-7		Well Established and Supported Program I-8	New Program, Minimal Facilities I-6	
	1	2	3	4	5	6	7	8	9	10
1. Comprehensiveness of testing	-.511*			(-.212)						
2. Amount of group guidance	-.561*									
3. Amount of parent contact	-.595*									
4. No. of professional organization, counselor	-.536*							(.399)		
5. Amount of placement activity	-.489*									(-.400)
6. Uses made of occupation info.	(-.344)*				(.294)					-.571
7. Availability, outside referral	-.525									
8. % time spent on personal problem	(-.421)				(.379)				(.380)	
9. Amount follow-up activity	(-.404)						.500			
10. % time seeing violators		.844*								
11. % referred by staff		.778*								
12. % students who had seen counselor		.726*								
13. Ave. no. times student saw counselor			.818*							
14. Total time spent with counselor			.825*							
15. Ave. no. times graduate saw counselor			.481*							

Table 34 (Continued)

	I-1 1	I-2 2	I-3 3	I-4 4	I-5 5	I-7 6	--- 7	I-8 8	I-6 9	--- 10
16. % time on actual counseling				.801*				(.215)		
17. % time on nonguidance work				.806*						
18. Rating of counselor (field worker)					.670*					
19. Score of counselor (students)					.616*	(-.335)				
20. Bd. of Education support						.512*				
21. Administrative cooperation				(-.331)		.468*		(.349)		
22. Improvements in guidance program						.576*				
23. Teacher guidance effort (counselor)							.577			
24. No. yrs. program NDEA approved								.700*		
25. Salary budget for guidance	(-.221)	(-.105)	(-.068)	(-.051)	(.192)	(-.026)	(.302)	.640*	(-.305)	(-.040)
26. Student-counselor ratio	(-.189)	(-.342)	(-.245)	(.042)	(.188)	(-.171)	(.060)	.676*	(-.006)	(.064)
27. Amount clerical help available								(.423)		
28. Adequacy, guidance facilities										
29. Years counselor experience, counseling				(.207)		(.307)			.640* .547*	
30. No. years school has guidance program	(-.395)	(-.305)	(-.047)	(-.200)	(.051)	(.128)	(.025)	.461	(-.380)*	(.030)
31. Depth of reasons for seeing counselor			(-.359)		(.366)					
32. Adequacy, student records										.502

*Used in calculating scale scores

Factor coefficient not significant at .01 level listed in parenthesis

Factor I-1, Low Level of Guidance Activity. This factor, shown in column 1 of Table 34, gets its loadings from measurements of practically all of the traditional guidance activities (aside from counseling)--testing, group guidance, parent contacts, placement activities, uses of occupational information, and follow-up. Each of these loads negatively into the factor. In addition, the number of professional organizations to which the counselor belongs and the availability of outside referral load negatively into the factor.¹ Variables numbered 1 through 6 were used in calculating scale scores for this factor. It should be noted that, while the coefficient of variable number 6 is not very high, the variable was used in calculating scale scores because, up through the tenth Varimax rotation this variable loaded heavily into Factor I-1, finally moving into the tenth column. It appears that column ten represents mostly residuals from Factor I-1, and was not used. It is of interest to note that this "low-guidance" factor does not receive any substantial loading from the student-counselor ratio.

Factor I-2. Problem-oriented counseling. (Column 2, Table 35). Very heavy loadings in this factor come from three variables: (a) time spent with violators of school rules; (b) time spent with referrals from staff; and (c) proportion of student body who report having spent time with the counselor, the last one loading negatively. Students referred by staff are generally those having difficulty with class work or other problems, or those not getting along with the instructor. There is also some negative loading from student-counselor ratio. This factor, then, seems to represent a situation in which the counselor spends his time with deviant students and students with problems of adjusting to school, and the average student seldom sees him.

Factor I-3. Superficial Student-Counselor Contact. (Column 3, Table 34). The highest loadings on this factor, all negative, come from the number of times on the average that students have seen the counselor, the number of times on the average that last year's graduates reported seeing him, and the average total time spent with him. This situation is to be distinguished from the one in which students do not see the counselor unless they are in trouble. It would appear that this factor describes the school where the counselor routinely schedules everyone to see him, but the contact is typically brief and superficial. This factor receives some loading (significant at the 5% level) from the variable indicating depth of reasons for seeing the counselor--again negative.

¹While membership in professional organizations is not a guidance activity, it may be construed as a supportive activity and some evidence of interest in carrying out and improving guidance activities. Availability of outside referral resources is as much a function of the counselor's having actively sought and worked out relationships to referral agencies as it is a function of the presence of such agencies.

Table 35

Intercorrelations of Scale Scores for Input Factors

	Low Level of Guidance Activity I-1	Problem-Oriented Counseling I-2	Superficial Student-Counselor Contacts I-3	Emphasis on Non-Guidance Activities I-4	Good Counselor Image I-5	New Program, Minimal Facilities I-6	Discontented Counselor, Unimproved Program I-7	Well-Established and Supported Program I-8
	1	2	3	4	5	6	7	8
I-1 Low Level of Guidance Activity	----	<u>.21</u>	.15	.20	-.17	<u>.41</u>	<u>.41</u>	<u>-.45</u>
I-2 Problem-Oriented Counseling	<u>.21</u>	----	.05	.08	-.28	<u>.29</u>	<u>.35</u>	<u>-.41</u>
I-3 Superficial Student-Counselor Contacts	.15	.05	----	.16	-.11	.08	<u>.21</u>	<u>-.30</u>
I-4 Emphasis on Non-Guidance Activities	.20	.08	.16	----	-.15	<u>.22</u>	<u>.39</u>	<u>-.24</u>
I-5 Good Counselor Image	-.17	<u>-.28</u>	-.11	-.15	----	-.16	<u>-.34</u>	<u>.27</u>
I-6 New Program, Minimal Facilities	<u>.41</u>	<u>.29</u>	.08	<u>.22</u>	-.16	----	.17	<u>-.45</u>
I-7 Discontented Counselor, Unimproved Program	<u>.41</u>	<u>.35</u>	<u>.21</u>	<u>.39</u>	<u>-.34</u>	.17	----	<u>-.41</u>
I-8 Well-Established and Supported Program	<u>-.45</u>	<u>-.41</u>	<u>-.30</u>	<u>-.24</u>	<u>.27</u>	<u>-.45</u>	<u>-.41</u>	----

All correlations significant at .05 level are underlined.
Correlations above .27 are significant at .01 level.

Factor I-4. Emphasis on Nonguidance Activities. (Column 4, Table 34). The major loadings in this factor come from two variables--the proportion of a counselor's time spent carrying out duties not related to guidance, and a negative loading from the proportion of counselor time spent actually counseling. Obviously there is a high negative correlation between these two, but when one of these is fixed there is still a degree of freedom--time spent in guidance functions other than counseling. The fact that there is no negative loading on this factor from the various guidance functions (except perhaps testing), nor from student-counselor ratio, suggests that the factor does not imply essentially "no guidance" as does Factor I-1, but rather that it describes a situation where the counselor spends considerable time, either by inclination or because of local pressure, in nonguidance activities around the school, and takes that time away from actual counseling. The fact that there is some negative loading from the variables "counselor experience" and "number of years the school has had guidance" suggests the possibility that the counselor does not feel too competent in counseling and spends his time in other activities, guidance and nonguidance. The negative loading from "administrative cooperation" (as seen by the counselor) could suggest administrative pressure to do nonguidance work; perhaps both kinds of influences exist.

Factor I-5. Good Counselor Image. (Column 5, Table 34). The major loadings on this factor come from two variables, with support from some others. Each student was asked to answer a Likert-type questionnaire, responding to 29 statements about certain qualities of the counselor's response to him (he tries to see things the way I do; he is curious about how I tick but not interested in me as a person, etc.) (See Appendix B, pp. 25-26).

All but three of these 29 items were taken from Barrett-Lennard's scale (1), with some modification in wording to make them applicable to high school counseling. Three were suggested by students during the pilot study. (He hurries me through my business with him; I often feel that he has more important things to do when I am talking to him; It seems that things like the phone often interrupt us when we're talking). Barrett-Lennard reports of his scale that each of the five subscales is reliable, that therapists otherwise judged to be better obtain higher scores, and that higher scores are predictive of more change in therapy. (1:31). High scores indicate a counselor who is perceived by his clients as warm, accepting, understanding, with unconditional high regard for the client.

The field workers were given a five point rating scale on which to rate counselors, along with a fairly extensive description of what a high rated counselor should be like. (See Appendix C, pp. 7-8). The team of two field workers

spent two to three days at each school, and then each rated the counselors independently and finally pooled their ratings.

The major loadings for Factor I-5 came from these two instruments. The factor also had considerable loading from "proportion of counseling time spent in working with personal problems" and "depth of reasons for seeing counselor," indicating, as might be expected, that a counselor who engages in deeper level counseling will also be more favorably perceived in terms of these two instruments. The variable "uses made of occupational information" also provided some loading.

Factor I-6, New Guidance Program with Minimal Facilities. This factor is found in column 9 of Table 34, and the loadings (all negative) come from the measures entitled "adequacy of physical facilities for guidance," "years of counseling experience of counselor," and (to a lesser degree) "number of years the guidance program has been in existence." There is also some negative loading from the items "salary budget for guidance," and "time spent on personal problems." This factor appears to describe a recently established program with a modest budget, for which adequate facilities have not yet been developed, with a new counselor who is perhaps not yet confident of his ability in personal counseling. It is to be noted, however, that there are no significant negative loadings from the items describing amount of guidance activities.

Factor I-7, Discounted Counselor, Unimproved Program. (See Column 6 of Table 34). The major loadings, all negative, come from the items "board of education support," "administrative cooperation," and "improvements in the guidance program in the last five years." (The first two measures are views of the counselor, the third came from the administrator). It may be noted that "salary budget for guidance" does not provide significant negative loading on this factor, that the perception of the counselor by students does load negatively, while years of counselor experience provides a substantial positive loading. A high scale score on this factor seems to indicate a situation where the counselor is experienced but unhappy with his situation, and not well perceived by students.

Factor I-8, Well Established and Supported Guidance Program. (Column 8, Table 34). This program has the kinds of support that have been thought to be important for good guidance. Major loadings are from the items "number of years the program has met NDEA standards," "salary budget for guidance," and "student counselor ratio." There are also very substantial loadings from "number of years the program has been in effect," "amount of clerical help available," and some from "administrative cooperation" and "number of professional organizations to which counselor belongs." If support of the program leads to good results, Factor I-8 should be predictive of good outcomes. Columns 7 and 10 were not used.

As has been noted, column 10 does not appear to represent a factor that can be distinguished in any meaningful way from Factor I-1. Column 7 has loadings from "follow-up activity" and "teacher guidance effort" (as seen by the counselor). A sample of six teachers in each school were asked to fill out forms indicating, among other things, the extent of their own guidance effort. It was found that the correlation was negligible between teacher guidance activity as viewed by themselves and as viewed by the counselor, and neither correlated with outcomes. It would seem that the reliability of one or both of these measures is in doubt. This item was inadvertently allowed to remain in the analysis, but the meaning of the factor in column 7 is far from clear, so no scale scores were calculated for it.

Scale scores were calculated as before for each school on each factor, and these were intercorrelated. The intercorrelations, shown in Table 35, shed further light on the nature of the factors, and also indicate that the input factors are much more independent of one another than are the situational factors, the intercorrelations for which were shown in Table 33.

Recapitulating, and with reference to Table 35 as well as Table 34, the following eight "input" factors were extracted, scale scores computed on them for each school, and intercorrelations calculated:

Factor I-1, Low Level of Guidance Activity. A high scale score on this factor characterizes a school situation in which little or no typical guidance activity is carried on. This factor is positively related to poorly supported programs and new programs with minimal facilities, and negatively to well-established and supported programs.

Factor I-2, Problem-Oriented Counseling. This factor characterizes a situation in which the counselor spends his time with violators of school rules and with students sent to him by teachers and administrators (usually those with academic or conformity problems), and most students never get to see him. This factor appears to go along to some small degree, with new minimal programs and poorly supported programs, and is not likely to be found in schools with well-established programs or where counselors are well perceived.

Factor I-3, Superficial Student-Counselor Contact. This factor is almost totally independent of the others, except for a small negative correlation with well-established and funded programs. It describes a situation in which the students do see their counselor, but only once or twice, briefly and superficially. Although they are rotated through his office, they do not seek him with problems of any depth.

Factor I-4, Emphasis on Nonguidance Activities. This scale score describes a situation in which the counselor, voluntarily or otherwise,

spends much time doing things not related to guidance, and correspondingly little time in actual counseling. This nonguidance emphasis does not appear to be related to any other guidance input factor except "discontented counselor." One frequently hears the complaint that administrators want counselors to do nonguidance work and will not support counselors who fail to comply. The lack of relationship between nonguidance and administrative support raises some question about this belief.

Factor I-5, Good Counselor Image. A high scale score here indicates a situation in which the counselor is held in high esteem as not only effective but also as an understanding, empathic, accepting person who spends time in depth counseling. This, too, is little related to the other factors, the highest correlation (negative) being with "discontented counselor." The question of which comes first, discontent or poor counselor image, needs further exploration.

Factor I-6, New Guidance Program with Minimal Facilities, characterizes a guidance program recently initiated, with poor facilities, little money and an inexperienced counselor. As one might expect, this is related to low level of guidance activity, and negatively to "well established and supported program." It is, in fact surprising that the relationships are not higher; perhaps this is because older established programs at times also have poor facilities and support.

Factor I-7, Discontented Counselor, Unimproved Program, indicates a guidance program which has not been improved for some time, and in which the counselor feels that he gets little administrative or school board support. The intercorrelations indicate that this situation is related to "low level of guidance activity," "emphasis on nonguidance" and on "problem-oriented counseling," and negatively to "good counselor image" and to "well-established, supported program." It is also notable that this is not a new minimal program. This factor seems to indicate poor morale with little guidance activity and a poorly perceived counselor.

Factor I-8, Well Established and Supported Program. The loadings on this factor come from variables measuring the support desired for all guidance programs--a good budget, good student-counselor ratio, clerical help, and generally a long standing program meeting minimal good standards. This factor is significantly correlated, in the expected directions, with every other factor (although only at .05 level with Factor I-4 emphasis on nonguidance.)

Factor Analysis of Outcome Variables, All Schools

Forty five variables labelled "outcomes," were used in the factor analysis, the rest being left out for the kinds of reasons discussed

at the beginning of this chapter. There were eleven eigenvalues greater than one,¹ with about 66% of the total variance being accounted for by these 11 factors. Using Harman's procedure, it was estimated that factor coefficients larger than .500 would be significant at the .01 level, with .450 at the .02 level, and .380 at the .05 level. Five variables had no coefficients higher than .300, well below the .05 significance level, and were omitted from further consideration. The remaining 40 variables are shown on Table 36 giving all factor coefficients over .300. The variables left out were: average number of extra curricular activities in which the students participate; proportion of top 15% of class going to college in 1966; success in training;² percent of sample reporting receiving help in depth; underachievement as measured by comparing ability and high school rank. The factors which were extracted and for which scale scores were computed are given below.

Factor 0-1, General Satisfaction with Guidance. (Column 1, Table 36). The variables with heavy loadings on this factor were: satisfaction of the administrator with his guidance program; average satisfaction expressed by a sample of six teachers; average helpfulness of the counselor as rated by the students; the proportion of students who said that their counselor was the person to see when one had problems in school; and the proportion of graduates who said the same thing. These items were used for computing scale scores, but as is shown in Table 36, the factor also has heavy loadings from the percent of students and graduates who would see the counselor with vocational and personal problems, as well as the judged helpfulness of the guidance program to students in general.

Factor 0-2, Good Holding Power. (Column 2, Table 36). The scale scores were obtained from three variables with heaviest loadings on the factor: lack of dropouts, boys; lack of dropouts, girls; and yearly attendance (as percent of perfect attendance). The last factor coefficient did not quite reach the .01 level but is clearly indicative of holding power. Other variables with considerable loadings on this factor were proportion of boys going to college, proportion of the top 15% of last year's class going to college, and (negatively) percent of students repeating courses.

¹These first 11 eigenvalues were: 6.30482, 4.03858, 3.74725, 2.22517, 2.14787, 1.84564, 1.75397, 1.52062, 1.27311, 1.16231, and 1.08519.

²Despite the very considerable effort made to contact all training institutions which the class of the previous year reported attending, this measure did not appear to function. The reason most probably is the extreme heterogeneity in the kinds of training institutions attended and ways of determining or estimating degrees of success.

Table 36

Factor Loadings of Outcome Variables

Variable	General Satisfaction with Guidance 0-1	Good Holding Power 0-2	Lack of Helpfulness, as Recalled 0-5	High Incidence of Continued Education 0-4	High General and Academic Self-Concept 0-3	Vocational Immaturity and Underachievement 0-6	Diffident Vocational Aspirations 0-7	Unrealistic Goal Setting 0-8		
	1	2	3	4	5	6	7	8	9	10
1. Administrative satisfaction with guidance	.656*									
2. Teacher satisfaction with guidance	.660*									
3. Student satisfaction with counselor	.678*		-.307							
4. % student who would see counselor about school problem	.673*									
5. % graduates who would see counselor about school problems	.651*									
6. Help from guidance (to students generally)	.626									
7. % students who'd see counselor with vocational problems	.545									
8. % graduates who'd see counselor with vocational problems	.527		-.316							
9. % study who'd see counselor with personal problems	.472									
10. Lack of dropouts, boys		.783*								
11. Lack of dropouts, girls		.742*								

Table 36 (Continued)

	0-1 1	0-2 2	0-3 3	0-4 4	0-5 5	0-6 6	0-7 7	0-8 8	--- 9	--- 10
2. Percent attendance		.483*							-.439	
3. Percent repeating courses		-.381						.469*		
4. Total guidance help of all kinds (graduates)			-.959*							
5. Guidance help (graduates) at LEVEL I			-.724							
6. at LEVEL II			-.777							
7. at LEVEL III			-.816							
8. at LEVEL IV			-.764							
9. Percent to college, boys		.325		.665*		-.447*				
10. Percent to college, girls				.704*		-.452*				
11. Percent to vocational school, boys				.689*						
12. Percent to vocational school, girls				.674*						
13. Self-concept					.821*					
14. Self-acceptance					.673					
15. Academic self- concept					.635*	-.464				
16. Importance of aca- demic achieve- ment					.659*					
17. Underachievement						.703*				
18. Vocational maturity						-.407*		-.342		
19. High aspirations relative to ability						.408		.318		
20. Proportion of top 15% going to college, 1965						-.433				
21. Proportion of low 15% going to college, 1965						-.550				
22. Proportion of low 15% going to college, 1966						-.584				
23. Congruence in field of ideal and real occupational choice							-.655*			
24. Low aspiration relative to ideal vocation							.716*			

Table 36 (Continued)

	0-1 1	0-2 2	0-3 3	0-4 4	0-5 5	0-6 6	0-7 7	0-8 8	--- 9	--- 10
35. Low aspiration relative to ability							.467 ⁼⁼			
36. % graduates see counselor; per- sonal problems	.305						-.406			
37. High aspiration relative to ideal vocation								.664*		
38. % juvenile law- breakers									.704	
39. % emotional prob- lems reported to administration									.726	
40. Congruence of plans and what doing, graduates										.544

*Used in calculating scale scores.

Significant levels: 500 = .01; .450 = .02; .380 = .05

While these are not direct indices of holding power, they would appear to be characteristics of a school with good holding power.

Factor 0-3, High General and Academic Self-Concept. This factor is found in column 5 of Table 36, and obtains its loadings from four variables which were scores on tests administered to the students: self-concept; self-acceptance; academic self-concept and feeling of the importance of academic success.

The self-concept and acceptance of self scores are from Bills' Index of Adjustment and Values, High School Senior and College form. The Index (here called Adjective Scale, and given in Appendix B, p. 29) requires a response to 49 adjectives, first as to how well they describe the self, and second, as to how one feels about the way he described himself on each. The means for both indices in the present study were within two points of the means for high school seniors reported by Bills, and the standard deviation within six points. (2:17 and 19). Bills reports corrected split-half reliability coefficients running from .53 to .84 for self-concept, and over .90 for self-acceptance. Many kinds of validity studies are reported (pp. 63-86), showing modest positive relationships to other measures of self-concept as well as to measures of leadership, adjustment, success in teaching, etc. Acceptance of self is reported to be the best of several measures in the test, with high scores related to less psychosomatic difficulty, higher group acceptance, more dominance, responsibility, and participation, less tension and anxiety, and other similar measures.

The scores for "academic self-concept" and "importance of academic achievement" were developed by Brookover and his colleagues (3). The first eight items refer to academic self-concept, and items 9-15 to importance of academic success. (See Appendix B, p. 31). Brookover tests the hypothesis that a student's concept of himself as a student will affect his achievement, entirely apart from his ability. This hypothesis is confirmed, (p. 41) as well as the hypothesis that a student's concept of his ability is significantly related to the way he perceives that significant others feel about him as a student (p. 51).

Data from the present study indicate that each of the four scales is rather independent of the others, with self-concept and academic self-concept being most related; but the four of them together, loading into this factor, describe a setting in which students tend to have positive feelings about the kinds of persons they are, good acceptance of themselves as they are,

positive feelings about themselves as students, and acceptance of the importance of being that kind of students.

Factor 0-4, High Incidence of Continued Education. This factor, shown in column 4 of Table 36, receives its loadings from four items: the proportion of boys and of girls going on to college, and the proportion of boys and of girls going on to vocational school.

The above four factors might be termed positive outcomes; the next four negative.

Factor 0-5, Lack of Helpfulness, as Recalled. This "factor" is essentially a single variable, from which four subscores and a total score were derived. The questionnaire to the previous year's graduates listed 20 kinds of help that they might have received from a counselor or someone acting as a counselor (Appendix B, p. 42, Item 20), and the graduates were asked to indicate which of these types of help (or others) they actually received. Four "levels" of help were identified, from fairly superficial (e.g., information about colleges) to deeper levels (e. g., helping me decide on a career, considering my aptitudes, interests, etc.) In column 3 of Table 36, are shown the loadings into Factor 0-5 of each of these levels, and also of the total score, which has a factor coefficient of $-.959$. Because the total score is the sum of the four subscores, only the total score was used as the scale score. It may be noted that there is also a negative loading into this factor from the item on which present students indicated their satisfaction with the counselor, and the item on which graduates indicated that they would have gone to the counselor with vocational problems. This factor is, thus, a perceived lack of helpfulness of the guidance program or counselor, primarily in retrospect a year after graduation.

Factor 0-6, Vocational Immaturity and Underachievement. (See column 6 of Table 36). The two measures that define this factor are underachievement and vocational maturity.

A single standard score was obtained for "measured ability" from two tests, the Minnesota Scholastic Aptitude Test and the Army General Classification Test, by converting each to z-scores and getting the mean. Similarly, a single standard score for "measured achievement" was obtained from the Iowa Social Studies test and the Minnesota English test. (The high school rank could not be included since it could not be treated in the same way; it is a percentile rank to begin with, and based on a different set of students in each school.) Underachievement by school was defined as the proportion of students whose measured achievement was lower than their measured ability (when compared with the total sample of 1116 students).

The vocational maturity score is from the attitude test of Crites' Vocational Development Inventory, an instrument for measuring increasing maturity through high school with respect to participation or involvement in the vocational choice process, amount of task-orientation in considering a vocation, independence in making decisions about vocation, bases for vocational choice and conceptions of the choice process. (5:35). A high score indicates presumably mature attitudes toward the dimensions of vocational development named above. Maturity is defined essentially as a consistent relationship between grade level (from 5 to 12) and item response.¹

The loadings on this factor are a high degree of underachievement and a low degree of vocational maturity. It appears consistent with not achieving up to capacity and having rather immature notions about vocational plans that the factor should also receive very substantial negative loadings from several items having to do with going on to college, whether the top 15%, the low 15%, or the entire class is considered. Only the items for the entire class (boys and girls) going to college were used in computing scale scores on the assumption that these are more representative.

While the variables loading into this factor seem to suggest several psychological dimensions, the existence of the factor implies some kind of commonality. The factor does not represent just underachievement or immaturity, but a situation in which students are in fact vocationally immature underachievers, who (perhaps because of this) tend not to go on to college. In light of Brookover's finding that academic self-concept affects one's achievement relative to ability, it is interesting to note that there is a secondary but very substantial (.02 level) negative loading into this underachievement factor from the variable entitled "academic self-concept." Also lending support to the "immaturity" interpretation is the loading from the item indicating unrealistically high vocational aspirations relative to measured ability (and of course, even higher relative to achievement).

Factor 0-7, Diffident Vocational Aspirations. (Column 7, Table 36). The scale scores for this factor were obtained from

¹The summary statistics for Crites' sample of 12th graders (5:24) and the sample in the present study are very similar, as shown below:

	N	Mean	Std. Deviation
Crites	143	39.00	4.00
This study	1044	38.81	4.66

three variables. The heaviest loading is from an item indicating low vocational aspiration relative to one's ideal vocation.

Each student was asked what he would like to do or be under optimum conditions, and what he actually plans to become. Each of these vocations was assigned an AGCT-equivalent score, as explained in Chapter 3 p. 61. These equivalent scores, since they are at best rough estimates, were converted to stanine scores, and discrepancies determined from these. In this case, the discrepancy indicates that the "realistic" choice is one or more stanines below the "idealistic" choice.

Using the AGCT equivalent of the "real" choice, and the actual AGCT score of the student, and again converting to stanines, discrepancy scores were developed between vocational choice and measured ability. Item #35 indicates occupational choices considerably below measured ability.

The third variable used is congruence of vocational field between ideal and real choice. The negative loading from that item indicates discongruence. An example of such discongruence would be where a student would like to be in a social service area of work but for "practical reasons" is planning to go into business detail work. Thus, this factor implies a situation in which there is an unwillingness to seriously consider entering the vocational field of one's desire; instead a choice is made of a different and less demanding field that is relatively undemanding for one's level of ability as well.

Factor O-8, Unrealistic Goal-Setting. It would be well to be particularly cautious in interpreting and drawing inferences from this factor. The major loading is from the item measuring discrepancy between the occupational levels of the "ideal" and "real" vocational choices, where the "real" choice is higher than the ideal. A very tentative interpretation will be made here, based on the fact that there is some negative loading into the factor from the item "vocational maturity," from high vocational aspiration relative to ability (aspiration refers here to "real" choice), and from the item indicating the proportion of students who are failed and required to repeat courses each year. A number of studies of level of aspiration have indicated that, while success tends to promote realistic levels in future, and lack of success tends to promote lowering of aspirations, there is a special situation with respect to unrealistic overstrivers. These appear to be people who, under pressure and lacking self-confidence, cannot admit to feelings of inadequacy, and are able to resolve their anxiety by pushing their levels of aspiration so high as to be clearly unattainable. They thus assure significant others that at least their intentions are good, while at the same time having a built-in excuse for failure.

It is indeed tenuous to infer such a situation from the variables under consideration, but certainly the high rate of failure, implying unusual pressure, the evidence of immaturity in attitudes toward vocation and career, plus high goals relative to measured ability, are at least straws pointing in the direction described in the previous paragraph. Perhaps it is worth noting that the second highest loading for the variable entitled "underachievement" was in this factor. (It was not shown because it is less than the .300 set as the minimum.)

Columns 9 and 10 appear to be even more tenuous and were not considered in further analysis. The only variable with a factor coefficient over .300 in column ten was "congruence between plans last year and what graduate is now doing." For this purpose, the graduates were asked in the mail questionnaire to look back to their senior year and indicate what they had planned to be doing at the present time, and to compare this with what they were doing. Because the great majority did not recall any difference, the differences in school scores are based on only a few cases of discongruence and are probably not meaningful.

There is some reason to believe that the variable in column 9, percent of students known to have emotional problems, is not a measure of the actual number of students who actually do have such problems or actually have sought professional help, but of a relationship with school authorities such that the authorities are aware of what is going on. In the extraction of factors this variable initially loaded positively on the "satisfaction with guidance" factor. The percent of students estimated to have been apprehended for breaking laws seems to be a residual from the "holding power" factor, into which it weighted negatively. Because of such ambiguities, column 9 was not used.

Scale scores were computed for all schools on the eight outcome factors as before, and intercorrelations were calculated; the correlation matrix is shown in Table 37. From that table it is evident that the factored outcome scores are considerably more independent than are the situational or input factors. In summary, the outcome factors are as given below.

0-1, General Satisfaction with Guidance, as expressed by students, teachers, and administration. Evidence of the stability of this outcome is its negative relationship to lack of helpfulness as recalled by the graduates (Table 37). It is also slightly negatively related to unrealistically high goal setting.

0-2, Good Holding Power--lack of dropouts and high attendance rate. As might be expected, this factor is related to high incidence of continued education, although moderately, and negatively related to vocational immaturity and underachievement.

0-3, High General and Academic Self-Concept--positive feelings by students about the kinds of persons they are, the kinds of students they are, and the importance of being like that. This factor is essentially independent of all other outcomes except for a possible relationship to good holding power (.21).

0-4, High Incidence of Continued education--a high proportion going on to some kind of schooling. This is related to good holding power.

0-5, Lack of Helpfulness of the guidance program as recalled by graduates; from a list of the many ways they could have been helped, they checked only a few.

0-6, Vocationally Immature Underachievement--indicating situations in which students do not achieve as well as expected from measured ability, tend to have immature notions about the world of work and their own plans, and to not go on to school after graduating.

0-7, Diffident Vocational Aspiration, indicating schools in which students generally tend to "modestly" select lower level goals than they really want to or should have to, based on ability. The factor is unrelated to any of the others.

0-8, Unrealistic goal setting--this factor describes schools in which students select actual vocational goals higher than seems warranted by measured ability or even by their own real desires, almost as if to assure defeat in advance, and schools where the school policy is to fail an unusual number of students. This outcome, too, seems unrelated to other outcomes.

Table 37

Intercorrelations of Scale Scores for Outcome Factors

	0-1	0-2	0-3	0-4	0-5	0-6	0-7	0-8
General Satisfaction with Guidance 0-1	---	.13	-.07	.15	<u>-.36</u>	-.15	.05	<u>-.22</u>
Good Holding Power 0-2	.13	---	<u>.21</u>	<u>.36</u>	<u>-.22</u>	<u>-.29</u>	.04	<u>-.14</u>
High General and Academic Self-Concept 0-3	-.07	<u>.21</u>	---	.13	.04	-.14	.05	-.09
High Incidence of Continued Education 0-4	.15	<u>.36</u>	.13	---	-.11	<u>-.67</u>	-.09	.03
Lack of Helpfulness as Recalled 0-5	-.36	<u>-.22</u>	.04	-.11	---	-.11	-.14	.16
Vocational Immaturity and Underachievement 0-6	-.15	<u>-.29</u>	-.14	<u>-.67</u>	-.11	---	.07	.16
Diffident Vocational Aspiration 0-7	.05	.04	.05	-.09	-.14	.07	---	.10
Unrealistic Goal Setting 0-8	<u>-.22</u>	<u>-.14</u>	-.09	.03	.16	.16	.10	---

All correlations significant at .05 level are underlined. Correlations higher than .27 are significant at the .01 level.

Relationships Between Input and Situational Factors, All Schools

Before considering the relationships between the two kinds of predictor variables and outcomes, it is of interest to note their relationship to each other. In what kinds of settings do given kinds of inputs tend to occur? The intercorrelations are shown in Table 38.

It is clearly evident from the correlation figures in Table 38 that the "good things"--well-established and supported guidance programs of some duration, with high levels of guidance activity and a minimum of pressure on counselors to engage in nonguidance work--are to be found in greater degree in high-ability schools in advantaged communities with advantaged families and a good academic atmosphere. In short, it would appear that the best programs tend to be found where guidance is probably least needed. This evidence obviates the argument that, if guidance efforts do not seem to produce results, it must be because the efforts are expended where results can least be expected.

On the other hand, the intercorrelations referred to do not account for even half of the variance in guidance inputs. There are older, well established and supported guidance programs, particularly in disadvantaged areas of large cities. One kind of "guidance input," problem-centered counseling, is significantly related to low ability and lack of academic atmosphere. It appears that in such situations (which are also likely to be the "disadvantaged" situations) the counselor is likely to become aware of more frequent and severe problems, and to find himself busy trying to "put out fires" to the exclusion of more general guidance activities and counseling with the full range of students. This does not change the fact, however, that more money and support tend to go to guidance programs in advantaged areas; in fact, the very presence of more frequent and severe problems implies the need for more guidance effort so that counselors may also find time to work with other students.

Finally, it appears that certain guidance inputs function in ways that are independent of the settings in which guidance is carried out--superficiality or depth of student contacts, discontent of counselor, and, to a lesser degree, good counselor image.

The Relationship Between Factored Outcomes and Predictor Factors, all Schools

In the previous sections, the factor analysis of school scores on some 100 variables was described. Out of this analysis, scale scores were derived for six situational, eight input, and eight outcome variables. It is felt that these scale scores provide a

Table 38
Correlations of Situational Factors
with Input Factors

Input	Situational					
	Large Size S-1	Academic Atmosphere S-2	Low Ability S-3	Culturally Advantaged Community S-4	Proximity to Post-High Training S-5	Advantaged Family S-6
Low Level of Guidance Activity I-1	<u>-.54</u>	<u>-.39</u>	<u>.36</u>	<u>-.53</u>	<u>-.43</u>	<u>-.41</u>
Problem-Centered Counseling I-2	<u>-.24</u>	<u>-.30</u>	<u>.31</u>	-.13	-.04	-.13
Superficial Student-Counselor Contact I-3	-.04	.02	.09	-.11	-.05	-.17
Emphasis on Non-Guidance I-4	<u>-.28</u>	<u>-.01</u>	<u>.33</u>	<u>-.22</u>	<u>-.20</u>	<u>-.32</u>
Good Counselor Image I-5	<u>.13</u>	.29	<u>-.23</u>	<u>.25</u>	<u>.30</u>	<u>.19</u>
New Program with Minimal Facilities I-6	<u>-.60</u>	<u>-.46</u>	<u>.45</u>	<u>-.52</u>	<u>-.41</u>	<u>-.39</u>
Discontented Counselor, Unimproved Program I-7	-.20	<u>-.22</u>	.20	-.18	-.10	-.16
Well Established and Supported Program I-8	<u>.49</u>	<u>.24</u>	<u>-.38</u>	<u>.51</u>	<u>.39</u>	<u>.46</u>

Correlations significant at .05 level are underlined.

reasonably accurate and parsimonious summary of the original larger number of variables, and that the names given to the factored variables give fairly accurate brief descriptions of them. In considering interrelationships among the scores, however, it is well not to lose sight of the actual variables used in arriving at the composite scale scores.

Two questions will be considered in this section. The first question is, how are differences in outcomes related to differences in guidance programs and to the settings in which the programs are carried out? This question will be discussed in the context of the correlations of outcome factors with input and situational factors, as shown in Table 39.

Table 39

Correlations of Factored Outcomes with Predictor Factors, All Schools

	General Satisfaction with Guidance 0-1	Good Holding Power 0-2	High General and Academic Self-Concept 0-3	High Incidence of Continued Education 0-4	Lack of Helpfulness, as Recalled 0-5	Vocational Immaturity and Underachievement 0-6	Diffident Vocational Aspirations 0-7	Unrealistic Goal Setting 0-8
Input Factors	1	2	3	4	5	6	7	8
I-1 Low Level of Guidance Activity	<u>-.49</u>	.11	-.02	-.12	.07	.16	.01	-.04
I-2 Problem-Centered Counseling	<u>-.47</u>	-.11	<u>.23</u>	-.13	<u>.21</u>	<u>.21</u>	.02	.02
I-3 Superficial Student-Counselor Contacts	<u>-.24</u>	-.07	.07	.00	<u>.33</u>	-.10	-.13	<u>-.21</u>
I-4 Emphasis on Non-Guidance Activities	<u>-.29</u>	-.06	-.11	.14	.07	.02	.16	.07
I-5 Good Counselor Image	<u>.59</u>	<u>.29</u>	.02	<u>.41</u>	<u>-.42</u>	-.20	-.01	-.15
I-6 New Program, Minimal Facilities	<u>-.52</u>	<u>.11</u>	-.06	<u>-.11</u>	<u>.11</u>	<u>.31</u>	.06	.09
I-7 Discontented Counselor, Unimproved Program	<u>-.45</u>	-.04	<u>.22</u>	.02	.13	-.08	.07	-.03
I-8 Well-Established and Supported Program	<u>.63</u>	-.07	-.08	.05	-.14	-.18	-.07	-.13
Situational Factors								
S-1 Large Size	<u>.50</u>	<u>-.22</u>	-.02	.06	<u>+.14</u>	<u>-.31</u>	-.12	-.03
S-2 Academic Atmosphere	<u>.46</u>	.17	.14	<u>.32</u>	-.10	<u>-.40</u>	-.10	-.15
S-3 Low Ability	<u>-.41</u>	<u>-.26</u>	.02	<u>-.37</u>	-.11	<u>.64</u>	<u>.28</u>	.03
S-4 Culturally Advantaged Community	<u>.52</u>	-.02	.08	<u>.23</u>	-.01	<u>-.37</u>	-.10	-.04
S-5 Proximity to Post-High School Training	<u>.43</u>	.04	.18	<u>.22</u>	-.11	<u>-.26</u>	-.08	-.08
S-6 Advantaged Family	<u>.42</u>	.09	.03	.23	.01	<u>-.44</u>	-.11	-.07

Correlations significant at .05 level are underlined.

A second question arises from the consideration that, insofar as outcomes are related to inputs and situations, the possibility suggests itself of altering inputs (and possibly even some situations) in the hope that outcomes may be improved.¹ If such action were to be contemplated, what factors would it be best to change in order to (hopefully) effect the most change in outcomes? They may not be the ones that correlate most highly with the outcome, because the predictors themselves may be highly interrelated. In that case, changing several such predictors might have little more effect than changing just one, since they all predict the same portion of the variance in the outcome. For this reason, using correlation with outcomes as the sole basis for selection of predictors to change may not produce the most efficient changes.

Multiple regression analysis is one way of selecting the combination of predictor variables (factors in the present context) that best predict the outcome. In this study, a stepwise regression analysis was carried out. In this analysis, the program computes a sequence of multiple linear regression equations in a stepwise manner, adding one variable at each step.² The first variable added is the predictor that has the highest zero-order correlation with the criterion, and at each step the variable added is the one which makes the greatest reduction in the error sum of squares; equivalently, it is the variable that adds most to the multiple correlation with the criterion.

In Table 40 are shown the factored outcomes, the three to five predictors which together have the highest multiple correlation with each outcome, numbered in the order in which they were added into the linear equation, and the value of Multiple R for the number of predictors shown. The judgment as to the number of predictors to use was based on the amount of increase in the value of R^2 and on the F-value. In considering Table 40, the reader should note that: (a) the Multiple R's vary considerably, with the values for outcomes number 7 and 8 being so low as to have very little predictive value, although the R is significantly different from zero; (b) some predictor variables provide negative weights, meaning that the lower is the score on this factor, the better is the predicted outcome; and (c) some outcomes are more predictable from input factors, some from situational factors.

¹Changes in outcomes cannot be assured, of course, merely because inputs with which they correlate are changed, since it is always possible that the relationship is a function of their common dependence on some third variable. Nevertheless, if relationships exist they do at least suggest directions in which to change the predictors, to be followed by an evaluation of the results of such changes.

²The program used was BMD02R, Stepwise Regression, version of June 2, 1964, Health Sciences Computing Facility, UCLA, adapted for Scope 2.0 system of the Control Data 6600, University of Minnesota Computer Center.

To recapitulate, two questions asked were: (1) To what extent are differences in each of the outcomes related to differences in guidance programs and the settings in which the programs are conducted; and (2) which three to six predictor variables together best predicted each outcome? (The Multiple R provides some further information; namely, an estimate of how well they predict.) The answers to these questions are provided by Tables 39 and 40, and are discussed below, by outcome.

General Satisfaction with Guidance

Practically every kind of input into the guidance program is significantly related to satisfaction with that program, as expressed by the administrator and the teachers, and helpfulness as felt by students. This finding is very positive and stable, whether the index of input is support for guidance, high level of guidance activity, minimal nonguidance activity, perception of counselor, or any of the other indices.

On the other hand, each of the situational variables is also significantly related to satisfaction in such a way as to indicate more satisfaction in advantaged communities, in schools drawing from advantaged homes, schools with high ability students, schools with a strong academic atmosphere, and larger schools in larger communities. The relationship between satisfaction and advantaged situations is to be expected, since it was earlier pointed out that the best guidance programs are to be found in such situations. And, of course, since students in these advantaged situations, with better ability, are more likely to attain life's goals even without guidance than are disadvantaged students, it may be that they are more easily satisfied with the help provided by the guidance program.

Considering now the second question, it is indicated in Table 40 that the best single predictor of satisfaction is a well-established and supported guidance program. Given such a program, the addition of a counselor who is perceived as effective and understanding adds most to the prediction of satisfaction. Following this, the most helpful addition will be an experienced counselor and adequate physical facilities; and finally, a step-up in the level of the various guidance activities (see Table 34, Input Factor 1). These factors together predict satisfaction with considerable accuracy. It may be noted that, despite the correlation between certain situations and satisfaction, all of the best predictors in combination are inputs, not situational factors. If low ability, for example, or disadvantaged homes, were strong suppressor variables that block satisfaction despite guidance efforts, they should have shown up in the equation, but they did not.

Table 40

Best Combination of Predictor Factors¹ for Each
Outcome Factor (All Schools)

Outcome Factor	Multiple R	Predictor Variables (Minus sign means negative loading)	
		Inputs	Situationals
1. General Satisfaction with Guidance	.82	1. Well-established and supported program 2. Good counselor image -3. New minimal program -4. Low level, guidance activities	
2. Good Holding Power	.59	1. Good counselor image	-2. Large size -3. Low ability 4. Proximity, post- high training
3. High General and Acad- emic Self-Concept	.43	1. Problem-centered counseling 3. Discontented counselor, unimproved program -4. Emphasis on nonguidance	2. Academic Atmosphere
4. High Incidence of Con- tinued Education	.61	1. Good counselor image 3. Emphasis on nonguidance	-2. Low ability -4. Large size 5. Proximity, post- high training
5. Lack of Helpfulness (graduates)	.62	-1. Good counselor image 2. Superficial student- counselor contact 4. Problem-centered counseling	-3. Low ability 5. Large size
6. Vocational Immaturity & Underachievement	.69	-2. Discontented counselor unimproved program	1. Low ability -3. Academic atmosphere
7. Diffident Vocational Aspirations	.35	-2. Superficial student- counselor contact	1. Low ability 3. Advantaged family
8. Unrealistic Goal Setting	.32	-1. Superficial student- counselor contact -2. Well-established and supported program -3. Good counselor image	

¹The predictor factors are numbered in the order in which they enter the regression equation. It must be kept in mind that the first predictor is the one with the highest individual correlation with the outcome, even if the difference between that correlation and the next one is negligible, in which case chance actually determines which of the two is used. However, the other variable will get into the equation if it contributes to the prediction independently of the first one in the equation; if it does not, one will serve as well as the other in predicting the outcome. It is a good corrective for any tendency to over-interpret the importance of the "first predictor" to look back at the table of correlations (Table 39) to see how close another variable came to being the first predictor.

Good Holding Power

Only one input, good counselor image, is related to good holding power. There is no evidence from this study that any other aspect of guidance relates to (and, therefore, has any effect on) holding power. Situationally, if the average learning ability of students is low, or if the school is large, more dropouts and absences may be predicted.

Looking at the regression equation, it appears that having a counselor who is perceived as interested, understanding and effective predicts best. Given such a counselor, good holding power is best predicted if the school is a small one, the students have high ability on the average, and the school is near institutions offering post-high school training. Prediction from these variables together is moderately good. It seems evident that, if better holding power is desired, little can be done about the size and location of the school, and perhaps about student ability. Obtaining the kind of counselor described seems a logical first step. Perhaps the current move in Minnesota to cover the state with area vocational schools and to increase the number of community colleges will operate to increase holding power, by moving the post-high school institutions closer to high schools now at a considerable distance from such institutions.

High General and Academic Self Concept

The correlations are negligible between this outcome and any of the inputs and situational variables. From the Multiple R in Table 40 it is evident that it is not possible to predict this self-satisfaction variable with any accuracy, even with the best combination of predictors. A very tentative explanation presents itself for the combination of the two best predictors--a counselor engaged largely in counseling students with problems rather than more typical students, in a school with a strong press for academic achievement and esthetic excellence. Perhaps in this instance the guidance activity is being predicted by the situational factor and the "outcome." In a school where the counselor perceives that the students are confident and self-accepting and where there is a strong press for academic excellence, perhaps the counselor feels that most students do not need his services, and thus spends his time with those in trouble.

The lack of relationships here is not surprising. Changes in self-perception are not easily effected, even with intensive therapeutic counseling, and the inputs here measured are far from intensive. One possible question the counselor might ask himself in looking at these results is, "How can I help develop a school atmosphere in which academic and esthetic excellence are prized?"

High Incidence of Continued Education

The correlation table suggests that where the counselor image is good, more students tend to go on to post-high school training, but that none of the other guidance inputs have any appreciable

bearing on this outcome. Situationally this outcome is related, as might be expected, to ability, to academic press in the school, and, in lesser degree to family and community advantage. It seems quite evident that the proportion of students continuing their education is more a function of the situation than of guidance effort.

Considering now the second question, the single best predictor is once again the "counselor image." Given this, the average ability of the students adds most to the prediction of continuing education, followed by a high level of nonguidance activity on the part of the counselor, smallness of school, and nearness to post-high school training facilities. Four of these predictors "make sense," but what can be the contribution of engaging in nonguidance? The writer has no ready explanation for this. It should be noted, however, that in Table 35 good counselor image and amount of nonguidance are slightly negatively related. In other words, the predictors for this factor seem to imply situations in which, despite carrying out many nonguidance functions the counselor is still able to maintain a positive image. It may be that the nonguidance activities of such counselors bring them out of their offices and into contacts with students, contacts which turn out to be valuable in a guidance sense. It may also be that in schools where many students go on (because of ability and for other reasons) the administrators tend to put their counselors to work on other things, on the assumption that guidance is not needed.

Lack of Helpfulness (as seen by Graduates)

This outcome is significantly related, negatively, to good counselor image; it is also related to the superficiality of student-counselor contacts. It is not significantly related to any situational variable. It is well to recall at this point how the "help" score was arrived at. The previous year's graduates (Class of 1965) received a form on which were listed (among other things) some twenty very specific kinds of help that students might obtain from counselors, and were asked which of these kinds of help they personally obtained while in school. The score for each school is the average; thus a high score means that graduates generally remembered receiving many kinds of help. The "counselor image" score came from field workers and from current students who checked a 29-item scale describing the way the counselor responds to them. The correlation here is further evidence of both the stability and validity of the "counselor image" score.

In this instance, the best combination of two predictors is the combination of the two with the highest correlations; evidently they account for different or independent portions of the variance in graduate satisfaction. Graduates will recall the program as helpful if the counselor is a good one, and this will be enhanced most if he spends some time with them in more than superficial contacts,

and does not work just with problem cases. Given these three factors, they will recall more help if they are from a school where the average ability is low, and the school is small. The small size of school, of course, implies the possibility of more personal contact with and knowledge of the student. It is interesting that this recollected helpfulness tends to apply to low ability schools where the other given predictor conditions prevail. Given the right conditions, students from low ability schools do find guidance helpful.

Vocational Immaturity and Underachievement

Only one guidance input is related to this outcome--new guidance programs with inexperienced counselor and inadequate facilities. Every situational factor is related to the outcome--low ability, cultural and personal disadvantage, anti-academic atmosphere, and small size. However, the highest single correlation in Table 39 is that between low ability and this outcome, and the picture that emerges from this and the other correlation figures clearly indicates that in schools attended by lower-ability, culturally disadvantaged students, where there is little academic atmosphere, there is much poorer achievement relative to ability and much less likelihood that vocational maturity will develop.

It must be emphasized here that the relationship between low ability and underachievement is, if anything, understated by the correlation coefficient. Underachievement, it may be recalled, was measured by converting ability tests and achievement tests into z-scores, based on this sample of students only, and labelling as underachievement each instance in which the achievement test z-score was lower than the ability test z-score. Underachievement for a school was defined as the proportion of students who had personal "underachievement" scores. Now it is evident from the procedure used that those students who scored low in ability should tend to score higher in achievement as a function of the so-called regression phenomenon, that is to say, chance errors. Therefore, schools of low average ability should tend to have a lower proportion of underachievers, insofar as test error or chance entered in, and the correlation should be negative between ability and underachievement, by school. The fact that it is not only positive but .64 clearly supports recent findings such as those of Coleman (4) that the educational system somehow makes it harder for those who start out with handicaps to achieve as well as they should even for their measured ability; the educational advantage goes to those

already advantaged.¹

Looking at Table 40, it is evident that the other variables add essentially nothing to the prediction of underachieving vocational immaturity made by low ability alone. Lack of "counselor discontent" and of academic atmosphere are the next two predictors; the meaning of the second seems evident, but not of "counselor discontent," which, it would appear, goes along with better achievement. In any event, guidance efforts appear to have no bearing on maturity-achievement as measured here.

Diffident Vocational Aspirations

There appears to be some slight relationship between low ability and this outcome; no other predictor factor correlates significantly with it. Looking at the regression equation, it would appear that, given low ability, then coming from a school in which there is much contact with the counselor and from an economically advantaged family increases the probability of shooting rather low in one's vocational goals. However, with a Multiple R of only .35, these variables even in combination have almost no predictive validity.

Unrealistic Goal Setting

This outcome score is unrelated to any of the input or situational factors. Even the best combination hardly predicts better than chance, but the predictors that may have some relation to unrealistically high aspiration are adequate student-counselor contact but within a framework of a less than adequate guidance program and poorly perceived counselors.

With respect to the last two factors, one might expect test-interpretation to help students identify realistic vocational goals, and no guidance activity is more often reported by students in their visits with counselors (except possibly getting college information)

¹Because the outcome variable included the vocational maturity score as well as underachievement, and because the finding here is of special concern in light of current criticisms about inequality of education, it may be noted that two regression equations were calculated for predicting underachievement alone. For the one in which underachievement is measured as explained above, the first predictor was low family income, the fourth in the equation was father's education. For the other, using high school success instead of test scores, the first predictor was ability (college aptitude); the fourth in that equation was also father's education. Thus it cannot be said that the high correlation here is simply a function of vocational immaturity; but even if it were it might be argued that quality education and guidance should increase vocational maturity.

than is testing and test interpretation. Yet this activity does not seem to affect either diffidently low or unrealistically high aspirations, as determined by the very kinds of instruments that counselors are likely to use and interpret to students. If anything, there seems to be a hint that more counselor contact is related to more congruence.

In summary, the best predictors of certain factors that were considered to represent outcomes of guidance, as shown in Table 40, tended more often to be various aspects of guidance programs than factors in the setting in which the guidance was carried out, although ability of students and size of school and community were also important predictors. Satisfaction seemed more predictable than certain other evidences of the value of guidance. Counselor personality, as it is perceived by students and observers, was by far the best predictor among the indices of guidance efforts and programs--considerably better than such factors as a high level of general guidance activity, a well-supported guidance program, and the like. Appropriateness of vocational choice, usually considered to be a major focus of guidance, was the least related of all the measures of outcome to any kind of index of guidance activity. All of the correlations were rather low, indicating the differences in the attainment of personal and social goals as measured here are only to a slight degree a function of what happens in guidance programs, but that guidance programs do appear to have at least modest effects.

Since student ability and school and community size appeared to be important determiners of differences in the "outcome" factors, it seemed important to consider subsamples that were more homogeneous in these respects, in order to determine whether the influence of guidance "input" factors would show up more clearly. Analyses similar to those above were made on the schools scoring highest and lowest on the "low ability" factor, and also on one-counselor schools, which are not only rather homogeneous in size but also make certain counselor data more meaningful because it is the score for a counselor rather than an average score for two or more counselors.

A Comparison of The Relationships Between Predictor and Outcome Factors in "High Ability" and "Low Ability" Schools

"Low ability" is a factor consisting of the composite standard score derived from three variables: average scholastic aptitude of the students, average father's education, and percent of students taking a college preparatory course in high school. The thirty schools with lowest ability, as determined by this scale score,

were compared with the 30 schools with highest ability.¹ In Table 41 are shown the correlations of outcome factors with input and situational factors for both low and high ability schools. The upper figure in each cell is for the high ability schools. In Table 42 are given the three to five factors that best predict each outcome for both low and high ability schools. The two tables will be discussed, by outcome, with emphasis on points of difference between high and low schools.

General Satisfaction with Guidance.

While a well-supported program and, in particular, a good counselor image, do correlate with satisfaction in the high ability schools, it is clear that the relationship between what is done in guidance and satisfaction with guidance is much more evident in low-ability than in high ability schools, and that, conversely, situational factors correlate more with satisfaction in high ability than in low ability schools. The question raised earlier, as to whether guidance efforts in disadvantaged areas can be effective enough to produce feelings of satisfaction, seems to be answered in the affirmative. In fact, it seems appropriate to conclude that in high ability schools, where students are likely to do well in any case, the guidance program benefits from a "halo effect" even though guidance efforts are less than maximal, whereas in low ability schools the guidance program is more likely to have to "earn its keep" to be appreciated.

The best predictor combinations (Table 42) do not differ much from the predictors for all 84 schools or from each other. An advantaged community becomes more important in high ability schools, and school press for academic and esthetic excellence helps predict satisfaction at both high and low levels.

Good Holding Power

Among low ability schools², size is the most important factor in holding power, with small schools in small communities having better retention and attendance. This accounts for the fact that, among low ability schools, new guidance programs with beginning

¹It must be noted that among the 30 "high-ability" schools there are as many small as large ones, and they are found in all parts of the state. The large ones tend to be in well-to-do suburbs and towns, however. Among the 30 "low-ability" schools, there are many more small ones; the large ones tend to be in deprived areas of cities.

Table 41

Correlations of Outcome Factors with Predictor Factors,
 "Low Ability" and "High Ability" Schools
 (N = 30 for each)*

Input Factors	Outcome Factors							
	General Satisfaction with Guidance 0-1	Good Holding Power 0-2	High General and Academic Self-Concept 0-3	High Incidence of Continued Education 0-4	Lack of Helpfulness, as Recalled 0-5	Vocational Immaturity and Underachievement 0-6	Diffident Vocational Aspirations 0-7	Unrealistic Goal Setting 0-8
	1	2	3	4	5	6	7	8
I-1 Low Level of Guidance Activity	-.29 <u>-.45</u>	-.14 .21	-.04 .15	-.03 .04	.04 .04	.19 -.10	-.09 -.15	-.24 -.02
I-2 Problem-Centered Counseling	-.16 <u>-.52</u>	.08 -.09	.50 <u>.39</u>	.26 -.16	.081 .22	-.16 .10	.13 -.01	-.03 -.18
I-3 Superficial Student-Counselor Contacts	-.20 -.26	.23 -.06	.36 <u>.21</u>	.24 .11	.61 <u>.38</u>	-.33 <u>-.28</u>	-.18 -.03	-.00 -.15
I-4 Emphasis on Non-Guidance Duties	-.08 -.38	-.13 .11	-.07 -.15	.13 <u>.52</u>	-.05 .15	-.18 <u>-.39</u>	.27 -.07	-.01 .13
I-5 Good Counselor Image	.59 <u>.42</u>	.13 .26	-.21 .00	.07 <u>.43</u>	-.51 <u>-.41</u>	.06 -.11	.14 -.01	-.30 .17
I-6 New Program, Minimal Facilities	-.13 <u>-.64</u>	-.30 .23	-.44 <u>-.16</u>	-.15 .20	+.11 <u>.13</u>	.33 -.10	.03 -.15	.17 .00
I-7 Discontented Counselor, Unimproved Program	-.37 <u>-.56</u>	-.05 -.03	+.40 <u>+.16</u>	+.42 <u>-.05</u>	-.10 <u>+.36</u>	-.32 -.19	.21 -.05	-.02 -.06
I-8 Well-Established and Supported Program	.44 <u>.82</u>	-.13 -.01	-.08 <u>-.37</u>	-.09 -.21	-.21 -.11	-.15 +.22	-.09 -.10	-.14 -.01
Situational Factors								
S-1 Large Size	.47 <u>.41</u>	-.22 <u>-.41</u>	.07 -.10	-.01 -.31	.11 .21	-.21 .13	-.04 .18	.01 -.15
S-2 Academic Atmosphere	.54 <u>.13</u>	.24 .19	.27 .04	.27 <u>.51</u>	.08 -.23	<u>-.46</u> <u>-.21</u>	-.10 -.07	.15 -.04
S-3 Low Ability	-.31 -.04	<u>-.40</u> <u>-.25</u>	-.02 .20	-.33 -.17	-.33 -.30	.55 <u>.50</u>	.20 .32	-.13 .34
S-4 Culturally Advantaged Community	.43 <u>.39</u>	-.18 .13	.15 .07	.18 -.12	.09 -.10	<u>-.40</u> <u>.04</u>	.05 .17	-.09 -.02
S-5 Proximity to Post-High Training	.29 .31	-.21 .18	.24 .18	.14 .02	.05 -.18	-.27 .09	.11 .12	-.09 .04
S-6 Advantaged Family	.40 <u>.06</u>	.02 .13	-.01 .03	.19 -.30	.13 -.09	<u>-.39</u> <u>-.04</u>	-.09 .25	-.05 -.01

*Upper figure in each cell is for "high ability" schools, lower figure is for "low ability" schools. Correlations significant at .05 level underlined.

Table 42

Best Combination of Predictor Factors for Each Outcome Factor
in High Ability and Low Ability Schools

Outcome Factor	Multiple R	Predictor (Minus sign means negative loading)	
		Inputs	Situational
1. General Satisfaction with Guidance	.89	-High Ability Schools-	
		1. Good counselor image*	2. Advantaged community
		-3. Discontented counselor	4. Academic atmosphere*
		-5. Problem-centered counseling	
		-Low Ability Schools-	
	.93	1. Well-established guid- ance program	5. Academic atmosphere*
		2. Good counselor image*	
		-3. New program	
		-4. High nonguidance	
2. Holding Power	.78	-High Ability Schools-	
		5. Good counselor image	-1. Low ability*
		-3. New program	-2. Advantaged community*
		-4. High nonguidance	
		-Low Ability Schools-	
	.60		-1. Large size
			2. Advantaged community*
			-3. Low ability*
			4. Academic atmosphere
3. High General and Acad- emic Self-Concept	.73	-High Ability Schools-	
		1. Problem-centered counseling*	
		-2. New program	
		3. Discontented counselor	
		-4. High nonguidance*	
		-Low Ability Schools-	
	.55	1. Problem-centered counseling*	4. Academic atmosphere
		2. Superficial student- counselor contact	
		-3. High nonguidance*	
4. Continuing Education	.60	-High Ability Schools-	
		1. Discontented counselor	-2. Low ability
		-Low Ability Schools-	
	.75	1. High nonguidance	3. Academic atmosphere
		2. Good counseling image	-4. Large size

Table 42 (continued)

Outcome Factor	Multiple R	Inputs	Predictors	Situational
5. Lack of Helpfulness (Graduates)	.84	1. Superficial student- counselor contact*	-High Ability Schools-	4. Academic atmosphere
		-2. Good counselor image*		
		3. New program		
	.64	-1. Good counselor image*	-Low Ability Schools	-3. Low ability
		2. Superficial student- counselor contact		
		4. Problem-centered counseling		
6. Immature Under- achievement	.73	-2. Discontented counseling	-High Ability Schools-	1. Low ability*
				-3. Academic atmosphere
	.67	-2. High nonguidance	-Low Ability Schools-	1. Low ability*
		3. Well-established guid- ance program		
7. Diffidence in Voca- tional Goals	.57	1. High nonguidance	-High Ability Schools-	4. Proximity to post- high training
		-2. Superficial student- counselor contact		
		-3. Well-established guid- ance program		
	.45		-Low Ability Schools-	1. Low ability
				2. Advantaged family
				3. Large size
8. Unrealistically High Aspirations	.46	-1. Good counselor image	-High Ability Schools-	
		-2. Low guidance activities		
		-3. Well-established guid- ance program		
	.52	-2. Problem-centered counselor	-Low Ability Schools-	1. Low ability
				-3. Large size

*Indicates that the factor is common to both high and low ability schools.

counselors correlate positively with holding power; such new programs are usually in small schools in outlying areas, while the older established programs for low-ability schools are in the big-city disadvantaged schools with high dropout rate. Aside from this relationship dependent on size, the only input relating to holding power is good counselor image in low ability schools and (negatively) new programs in high-ability schools.

From Table 42 it is evident that given small size in low ability schools, holding power is best in advantaged communities, with relatively higher ability and an academic atmosphere--all situational factors. In high ability schools, holding power is best where ability is the highest, but given this very high average ability, the outlying school away from the culturally advantaged community has better retention, and the retention is improved with older guidance programs allowing more time for guidance duties, and with well-perceived counselors. In both cases, however, holding power is predicted primarily from nonguidance factors.

High General and Academic Self-Concept

When the schools were grouped according to student ability, the correlations of input factors with self-concept were considerably higher, especially for high-ability schools. However, the nature of the correlations is such as to indicate that, rather than guidance efforts contributing to self-concept, it appears that more guidance effort goes with lower self-concept. In high-ability schools, self-concept is highest where the counselor has only superficial contact with the students generally, and tends to spend his time working with those students who are in some sort of difficulty. He also appears to be discontented, feeling that he is not getting good administrative cooperation, although there is no other evidence of this. The best predictors of high self-concept in high ability schools are problem-centered counseling by a discontented counselor, but not a new minimal program or much time demanded by nonguidance duties. It should be noted that situational variables, and particularly advantaged family and community, are also not particularly related to good self-concept.

What is the significance of all of this? Unless one wishes to entertain the hypothesis that counselor contact with students actually affects self-concept negatively, which hardly seems likely, something else must account for the relationships described above. A possible explanation is that, in schools where students feel satisfied with themselves as persons and as scholars, they do not seek out or feel any particular need for guidance, and may even discourage counselor efforts to work with them. The counselor thus finds himself meeting them only briefly and for superficial reasons, and spending his time with those who are in some kind of difficulty, a situation which tends to reduce his morale and create discontent.

Whether the explanation proposed above actually accounts for the relationships can only be determined by further studies aimed specifically at the issue; in any case, the results cited here most certainly do not provide support for the belief that guidance efforts improve self-concept.

In low-ability schools the situation is basically the same, although the relationships are generally somewhat lower. However, there is one difference; in low-ability schools, average self-concept is lower where there is a well-established and supported guidance program. It might be argued that this is to be expected, since low-ability schools in disadvantaged areas of cities are the ones with the oldest and best established guidance, and these are the areas in which self-concept is likely to be poor. Unfortunately, a look at the relationships of this outcome with the situational variables does not support the theory that the poorest self concepts in low ability schools are in the disadvantaged schools. Possibly a more tenable explanation is that administrators have detected some behavioral manifestations of low self-concept and have instituted guidance programs to improve the situation. If so, the success of such efforts is not demonstrated here.

High Incidence of Continued Education

Among low-ability schools, more students go on to post-high school training from schools where there is a strong press for academic excellence, where the counselor has many nonguidance duties, but where he is nevertheless well perceived as understanding and helpful. They tend to be the smaller low-ability schools, and advantaged family situations relate negatively if at all to continuing education. It seems likely that in these situations (small schools) the more advantaged students tend to inherit the family farm or business. In any case, if guidance efforts have any influence on continuing education in low ability schools, it must be in terms of the personal influence of the well-perceived counselor, despite the time he spends on nonguidance duties. (Perhaps even because of it, if his duties relate to student activities and bring him into contact with the students)

Among high ability schools, average ability and possibly a more academic atmosphere relate to continuing education, but the only guidance input that seems related is "discontented counselor, with unimproved program." One can only conjecture that in high-ability schools with a high proportion of students continuing, administrators do not feel a strong need to support or improve the guidance program, leading to counselor discontent. In any event, guidance factors evidently have no influence on this outcome for high ability schools.

Lack of Helpfulness (as seen by graduates)

High and low ability schools do not differ materially in terms of the factors related to lack of helpfulness as seen in retrospect.

In both kinds of schools, graduates checked relatively few kinds of help in schools in which present students and field workers have a poor perception of the counselor, and in which the counselor's contacts with students are brief and superficial.

Vocational Immaturity and Underachievement

As was true for the entire sample, low ability correlates most highly with underachievement for both high- and low-ability schools. Beyond this, underachievement in high-ability schools appears to be largely a function of cultural and personal disadvantage, and lack of an academic atmosphere, whereas these factors do not appear to be of much consequence in low-ability schools. In both types of schools, there is some indication that counselors have more and deeper student contacts where there is more underachievement. To the extent that this is so, it raises the question as to whether guidance contacts increase (or at least fail to lessen) vocational immaturity and underachievement, or whether counselors become aware of the low level of achievement in the school and spend more time with students in an effort to counteract this situation. The fact that, at least in low-ability schools, more maturity and better achievement go with more counselor time spent in nonguidance raises further questions, but neither the correlation table nor the list of top predictors provides any encouragement for the idea that guidance effort develops vocational maturity or better achievement relative to ability.

Diffident Vocational Aspirations

All of the correlations with this outcome are relatively low. In the low ability schools, a combination of low ability and advantaged family situation appears to best predict modesty in choice of vocation relative to ability and ideal. Modest aspirations appear to be found in high ability schools in which counselors spend much time on nonguidance duties but still find time to maintain more than superficial guidance contacts with students. It is doubtful that much can be made of this prediction beyond the fact that again no evidence was found to indicate that guidance efforts raised low vocational aspirations.

Unrealistically High Vocational Goals

The correlations here are low, with some slight indication that in high ability schools, poor counselor image goes with unrealism in goals, while in low schools this outcome seems to be a function of low ability. Thus both under- and over-aspiring tend to occur most in the lowest of the low-ability schools.

In looking at the top and bottom third of the sample, with respect to average ability, it is apparent that some shifts occur in the way

predictor variables relate to outcomes, but the basic patterns remain. Input factors continue to predict outcomes better than do situational factors, although even in these more homogeneous ability groups, ability continues to be strongly related to outcomes. One clearcut difference between high ability and low ability schools was the much higher relationship between guidance efforts and satisfaction with guidance in low-ability schools. A somewhat disconcerting trend is the tendency for superficiality and brevity of student counselor contact, sometimes coupled with emphasis on work with violators of rules and other students with problems to be related to outcomes such as good self-concept and high incidence of continued education. At best such trends may indicate deliberate decisions by counselors that the main student body does not need their help and that they should place their efforts where they are most needed. If such is the case, the effects of their efforts can not, of course, be ascertained by measurements on the student body as a whole. The relationship between much nonguidance activity and certain outcomes is even more problematical--unless such activity is actually student-related and more valuable than the usual guidance activities. Further exploration of this hypothesis is needed.

Relationships Between Factored Outcomes and Predictor Factors, One-Counselor Schools

In the discussion below of the 28 one-counselor schools, only the differences from the total sample are emphasized. The correlations between outcomes and predictor factors for these schools are shown in Table 43, and the best combinations of predictors found through regression analysis are shown in Table 44.

General Satisfaction With Guidance

The pattern of correlations of inputs with this outcome is very much like that for all the schools, except that the correlations are generally lower except for "counselor image" which holds up very strongly. "Discontented counselor" as a factor negative to satisfaction disappears. Among the situational factors, "large size" disappears as might be expected with rather equal sized schools, but so does "low ability." In one-counselor schools, higher average ability is not related to more satisfaction with guidance. The best combination of predictors consists altogether of guidance inputs. There can hardly be any doubt that a good strong well-supported guidance program, conducted by a counselor who is well perceived, will engender satisfaction with the program on the part of teachers and administrators, and a feeling by students that they are being helped.

Good Holding Power

The correlations of inputs with this outcome are generally considerable higher than they were for the total sample. This is

Table 43

Correlations of Outcome Factors with Predictor Factors,
Single-Counselor Schools (N = 28)

Input Factors	Outcome Factors							
	General Satisfaction with Guidance 0-1	Good Holding Power 0-2	High General and Academic Self-Concept 0-3	High Incidence of Continued Education 0-4	Lack of Helpfulness, as Recalled 0-5	Vocational Immaturity and Underachievement 0-6	Diffident Vocational Aspirations 0-7	Unrealistic Goal Setting 0-8
	1	2	3	4	5	6	7	8
I-1 Low Level of Guidance Activity	-.32	-.26	-.31	-.23	.15	.17	-.03	.16
I-2 Problem-Centered Counseling	-.23	-.26	-.04	.30	.22	.01	-.10	-.02
I-3 Superficial Student-Counselor contacts	-.33	-.20	.20	.02	.46	-.16	-.07	-.14
I-4 Emphasis on Non-Guidance Duties	-.24	-.36	-.04	.11	-.09	-.15	.14	-.05
I-5 Good Counselor Image	.53	.51	.29	.62	-.26	-.20	.12	-.13
I-6 New Program, Minimal Facilities	-.35	-.02	-.29	-.17	.35	.26	-.08	.06
I-7 Discontented Counselor Unimproved Program	.09	-.28	.09	.12	.02	-.24	-.09	-.16
I-8 Well-Established and Supported Program	.36	.12	.16	.00	-.16	.07	.23	-.12
Situational Factors								
S-1 Large Size	.04	.04	.19	-.01	.23	-.27	.12	-.06
S-2 Academic Atmosphere	.34	.38	.24	.15	-.34	-.20	-.01	-.13
S-3 Low Ability	-.02	-.33	-.14	-.35	-.21	.61	.24	.32
S-4 Culturally Advantaged Community	.24	.42	.41	.25	.04	-.24	.01	-.15
S-5 Proximity to Post-High Training	.31	.49	.50	.32	-.16	-.10	-.01	-.13
S-6 Advantaged Family	.16	.16	.29	.21	.24	-.34	.09	-.11

particularly true for "counselor image" which is up to .51 from .29, and "low guidance activities" which goes from + .11 to - .26. Thus when size is controlled, when one counselor influences the entire program, and when, incidentally, the "large city and suburb" factor is removed, it appears somewhat more probable that what is done in guidance can affect the holding power of a school. On the other hand, in such schools it is also evident that academic atmosphere and an advantaged community become very important determiners of retention, and the question remains as to whether the input correlation may not be a function of the fact that better communities have better guidance programs.

Predictively, good counselor image combined with a counseling program not limited to students in trouble, in an advantaged community, with a high level of guidance activities is the best combination; this looks somewhat better for guidance than does the predictor-combination for the entire sample.

High General and Academic Self-Concept

In the total sample, counselor discontent and problem-centered counseling seemed positively related to self-concept, but in one-counselor schools these relationships disappear and other guidance inputs such as level of activities, counselor image, and newness of program correlate with self concept. These correlations, although low, are in the direction that suggests a relationship between what is done in guidance and how students feel about themselves. But since the students in more advantaged situations also have higher self-concepts--a relationship that is much stronger in one-counselor schools, it seems doubtful at best that guidance programs actually influence self-concept in a favorable direction.

High Incidence of Continued Education

Good counselor image correlates with this outcome far more highly than do any of the other predictor-factors. Good ability and nearness to training institutions, as might be expected, also relate to the outcome, but the pattern is not too different from that for the entire sample.

Lack of Helpfulness (graduates)

Superficiality of student-counselor contacts and newness of the program are relatively more important and counselor image relatively less important than with all schools. It appears also that graduates from schools with generally more advantaged families remember less help from the guidance program.

Table 44

Best Combinations of Predictor Factors for Each Outcome
Factor in One-Counselor Schools

Outcome Factor	Multiple R	Predictor (Minus sign means negative loading)	
		Inputs	Situational
1. General Satisfaction with Guidance	.79	1. Good counselor image 2. Well-established guid- ance program -3. Problem-centered counseling -4. Low guidance activity -5. New program, minimal facilities	
2. Holding Power	.72	1. Good counselor image -2. Problem-centered counseling -4. Low guidance activity	3. Culturally advan- taged community
3. High General and Acad- emic Self-Concept	.71	-2. New program, minimal facilities -3. Low level of guidance activity 5. Well-established guid- ance program	1. Proximity to post- high training 4. Large size
4. Continuing Education	.72	1. Good counselor image 3. High nonguidance	-2. Low ability
5. Lack of Helpfulness (Graduates)	.76	1. Superficial student- counselor contact 2. New program, minimal facilities	3. Advantaged family -4. Proximity to post- high training 5. Advantaged community
6. Vocationally Immature Underachievement	.71	-2. High nonguidance	1. Low ability -3. Culturally advan- taged community
7. Diffident Vocational Goals	.46	3. Well-established guid- ance program 4. Good counselor image	1. Low ability 2. Large size
8. Unrealistically High Aspirations	.44	-2. Well-established guid- ance program -3. Low student-counselor contact	1. Low ability 2. Proximity to post- high training

Vocational Immaturity and Underachievement, Diffident Vocational Goals, and Unrealistic Goal Setting

There are no notable differences in the correlations of predictors with these outcomes from those reported for the total sample, and the relationships are generally no higher than might be expected by chance. Low ability is the best predictor of each of them, and is very highly related to immaturity and underachievement in these one-counselor schools, as it is in the total sample and in the other two subsamples.

In summary, there are no striking differences between one-counselor schools and the entire sample with respect to the relationships under study. Guidance inputs seem somewhat more related to holding power and student self-perception in one-counselor schools, but the differences are hardly more than suggestive of possible guidance influence. The perceived personality of the counselor continues to be the most important single guidance factor.

Some Special Factors in One-Counselor Schools

A factor analysis was carried out just for one-counselor schools in order to determine whether, under these conditions of greater homogeneity, different kinds of internally consistent scales could be developed. While some differences were found and a few new factors extracted, the resulting set of intercorrelations did not reveal any remarkable differences from the relationships found with the original sets of factors. A few of the different "new" factors may be of interest and are discussed below.

Two situational factors that were different were:

- A. Academic Press, consisting of (1) student press for scientism, (2) student press for intellectualism-competition, and (3) percent of students in college preparatory programs.
- B. Press for Breadth of Education, consisting of (1) high school press for estheticism-humanism, and (2) number of different subjects offered by the school.

Thus, the press scales split into two rather different kinds of factors, which related differently to outcomes.

Two new input factors were:

- A. Emphasis on Outreach Activities, consisting of (1) amount of follow-up activity, and (2) number of parent contacts.

- B. "Teaching-oriented" Guidance, consisting of (1) number of years counselor had been a teacher, and (2) negative loading from time spent on personal counseling.

In addition, the input factor called "high nonguidance" now received its major loadings from "percent time spent on nonguidance" (as before) and "lack of improvements in the guidance program recently." The factor "established program" was the scale score on the variables "number of years of NDEA approval" and "amount of clerical help available."

Two new outcome factors were:

- A. Unrealistic Vocational Aspirations Relative to Ability, consisting of both (1) low vocational goal relative to measured ability (AGCT), and (2) high vocational goal relative to ability.
- B. Perception of Counselor as Source of Help, consisting of (1) percent who would see counselor with vocational problems, and (2) percent who would see counselor with school problems.

Also, there was an outcome called "Underachievement," from which the Vocational Maturity score was dropped, and the scores for underachievement considered in terms of both test achievement and class rank. The best combinations of predictors, using the stepwise regression process, are given below for each of the three outcomes mentioned and also for "High Academic and General Self-Concept."

- A. Unrealistic Vocational Aspirations Relative to Ability, was predicted best by:
- 1. Well-established program
 2. Teaching-oriented guidance
 3. Bigness
 4. High nonguidance
- The total Multiple R was .63

Among the one-counselor schools, then, it seems one could expect more unrealistic vocational aspiration in larger schools with less well-established programs where the counselor tends to provide "teaching-oriented guidance" and spends much time on nonguidance.

- B. Perception of Counselor as Source of Help was predicted best by:
- 1. Teaching-oriented guidance
 2. Press for breadth of education
 3. Emphasis on outreach activities
- The total Multiple R was .53.

The counselor is more likely to be seen as a source of help if the school has a climate encouraging humanism-estheticism and breadth of education, and if the counselor engages in outreach activities, and not in "teaching oriented" guidance.

C. High General and Academic Self-Concept was best predicted by:

1. Emphasis on outreach activities
 2. Proximity to post-high school training
 3. Press for breadth of education
- The total Multiple R was .72.

These three factors together predict at least as well as the larger combination of rather mixed factors from the original analysis (see Table 44).

D. Underachievement was best predicted by:

1. Teaching-oriented guidance
- 2. Proximity to post-high training
- 3. Press for breadth of education.

It appears that high self-concept and under achievement are predicted by similar factors but in opposite directions.

The situational variable "press for breadth of education" was also significantly related to holding power. Thus it predicts self-concept, a positive perception of the counselor as helper, and good achievement, as well as holding power. A study of the intercorrelations indicates that it is quite different from the factor "academic press" when the two are applied to one-counselor schools, and if used in further studies should probably not be combined into one factor. Press for breadth was one of the top predictors in four factors; academic press in none.

The input factor "teaching-oriented guidance" was one of the best predictors of underachievement, unrealistic vocational aspirations (high and low), and, negatively, of perception of the counselor as a helper. Further study of this factor also seems indicated.

Relationships Between Predictor Factors and Follow-up Outcomes

Most of the field data were gathered during the school year 1965-66, with student data coming from the class of 1966. During that year, the previously graduated class (class of 1965) was contacted by mail questionnaire. Then in 1967 the original senior class was followed up one year later by mail (Appendix B, p. 43) thus, two different senior classes were contacted a year after graduation.

For each member of the class of 1966 who reported, upon returning the mail questionnaire, that he was or had been in any kind of training a report was also requested from the training institution. Five variables obtained in this follow-up of the class of 1966 were correlated with each of the predictor variables, and stepwise multiple regression equations calculated. The results of these analyses are shown in Tables 45 and 45, A, and are briefly discussed below.

Table 45

Correlation of Five Follow-up Outcomes with
Predictor Factors, All Schools

Input Factors	Satisfaction with Counselor	Total Kinds of Help Received	Satisfaction with Present Situation	Percent in Training	Training Success
I-1 Low Level of Guidance Activity	-.25	-.09	-.11	-.03	.03
I-2 Problem-Centered Counseling	-.30	-.26	-.09	-.14	.06
I-3 Superficial Student- Counselor contacts	-.28	.01	-.02	.05	.00
I-4 Emphasis on Nonguidance	-.17	-.06	.02	-.03	.05
I-5 Good Counselor Image	.47	.34	.07	.06	.01
I-6 New Program, Minimal Facilities	-.20	-.12	-.11	-.29	-.05
I-7 Discontented Counselor, Unimproved Program	-.25	-.17	.10	.12	.10
I-8 Well-Established, Supported Program	.31	.13	-.01	.08	-.06
S-1 Large Size	.17	-.04	.19	.22	-.02
S-2 Academic Atmosphere	.16	.15	.14	.26	-.02
S-3 Low Ability	-.15	.03	-.31	-.51	-.05
S-4 Culturally Advantaged Community	.23	-.03	.23	.35	.04
S-5 Proximity to Post-High Training	.19	.03	.16	.23	.03
S-6 Advantaged Family	.17	-.10	.34	.42	.03

Table 45, A

Best Combination of Predictor Factors for Each Follow-up Outcome

Follow-up Outcome	Multiple R	Predictors (minus sign means negative loading)	Input	Situational
1. Satisfaction with Counselor	.57	1. Good counselor image -2. Superficial student- counselor contact -3. Problem-centered counseling -4. Low level guidance activity		
2. Total kinds of help received	.43	1. Good counselor image -2. Problem-centered counseling		-3. Advantaged family
3. Satisfaction with present situation	.41	-2. Well-established guidance program -3. Problem-centered counseling		1. Advantaged family
4. Percent in training	.57	2. Discontented counselor		-1. Low ability 3. Advantaged family
5. Training Success--all predictors together provide a Multiple R of only .34				

Satisfaction With Counselor

This is a seven-point scale on which the graduate expressed a degree of satisfaction with the kind of guidance he had received from the counselor. Satisfaction as recalled a year later is still related to the guidance inputs in the expected directions, with relationship to counselor image being highest again. The best combination of predictors is once again made up entirely of input variables rather than situational variables.

Total Kinds of Help Received

This outcome is the average total score, indicating the kinds of help actually received from a list of many possible kinds of help that might have been given. It is exactly the same scale as was used by the graduates from the class of 1965, the previously graduating class. Thus, two classes a year apart filled out the same form, checking off the kinds of help received from the guidance program, and an average score was calculated for each school from each of these classes. It is, therefore, of special interest to compare the correlations of these two outcome measures with predictor variables. The only difference is that, in the case of the earlier class of 1965, the scores were factor analyzed and it turned out that they loaded negatively into a factor. Thus, outcome factor #6, "Lack of Helpfulness, Graduates," is the exact reverse of "Total Kinds of Help Received", but the data come from different classes.

A comparison of column 6 of Table 39 with column 2 of Table 45 shows that one is indeed almost the mirror image of the other; the startling similarity in the judgments of two classes one year apart testifies both to the reliability of the scale used and to the stability of the functioning of guidance programs, at least as perceived a year after graduating. The one exception to the similarity is "superficiality of contact," which correlated significantly with nonhelpfulness for the earlier group but does not with the second group. From Table 45, A, it may be noted that "advantaged family" is the third variable to enter the prediction equation, replacing "superficiality of contact." Students from advantaged situations report receiving less help from guidance.

Satisfaction with Present Situation

This outcome is based on a six-point scale ranging from total dissatisfaction to very great satisfaction with one's present life circumstances. The outcome is very little related to guidance inputs, and seems to be mostly a function of family advantage. The three best predictors suggest that good guidance programs are, if anything, predictors of less satisfaction a year later, but the predictive R is low; apparently most of the variance in present satisfaction is accounted for by factors not found in this set of correlations.

Percent in Training

This variable is the percent of the sample of 1966 graduates from each school who were in training a year later. There seemed to be some tendency for fewer to be in training from schools with new guidance programs; the other guidance inputs were unrelated to this outcome. Ability and family and community advantage once again are the major factors predicting how many will be in training. From Table 45, A it appears that counselor discontent predicts the number in training. A more likely explanation is that counselors in schools from which many enter training are, for some reason, likely to be less contented with their lot.

Although students report that a very large proportion of their time with counselors is spent in getting information on, and presumably discussing, post-high school education, there is no evidence here that guidance efforts or even the personality of the counselor have any bearing on the number who enter post-high training.

Training Success

This is based on reports from each of the training institutions into which the class of 1966 reported matriculating, using a five-point scale (Appendix B, p. 34). The average success of all graduates in training from each school was the outcome figure used here. There is no relationship between average success and any input or situational variable. The maximum multiple correlation using all 14 predictors was .34.

Because of the many different kinds of institutions attended by graduates from the various schools and even from any one school, it is logical to conclude that a general success scale could not be very meaningful. Before writing it off altogether, however, it should be noted that the correlation between "satisfaction with present situation" (the average score for the school) and "success in training" (average success for the school, reported by the various training institutions) was a surprising .52. This is higher than the correlation of either variable with other outcomes. The intercorrelations of the five outcomes are shown in Table 46.

Table 46

Intercorrelations of Five Follow-up Outcomes

	1	2	3	4	5
1. Satisfaction, counseling	---	.77	.48	.12	.30
2. Kinds of help	.77	---	.37	.02	.25
3. Satisfaction present situation	.48	.37	---	.41	.52
4. Percent in training	.12	.02	.41	---	.23
5. Training success	.30	.25	.52	.23	---

The correlation between these two average school figures from independent sources suggests that "training success" as measured may be more reliable than the lack of correlation with predictors indicates; it also suggests another source of variance in satisfaction with one's present situation--training success. This is a logical source of satisfaction but one not tapped by the predictors. The fact that neither present satisfaction nor success is correlated with any guidance inputs may mean, after all, that guidance programs simply do not foster such outcomes, rather than that the measurement was inadequate.

Discussion and Summary

A large number of rather crude indices of guidance inputs, situational variables, and presumed outcomes were reduced, by a factor--analytic method, to a considerably smaller number of less redundant scales with relatively high internal consistency. Correlations among these scales were then examined in order to determine the extent to which differences in presumed outcomes were related to differences in guidance programs and to the settings in which they are conducted. By means of a stepwise multiple regression technique, the three or four predictor variables were selected which in combination best predicted each of the outcomes. The results of these analyses are to be found in the tables throughout the chapter, not only for the total sample of schools but also for high ability and low ability schools and one-counselor schools, as well as for five non-factored outcomes of a follow-up study.

It is not a simple matter to interpret relationships or the absence of relationships between guidance inputs and presumed outcomes. The following guidelines for interpretation of findings and conclusions may be of some value; the reader may think of others as well.

- A. If significant correlations are found between inputs and outcomes:
 1. Where these relationships persist under varied situational influences, and tend to be generally higher than the correlations of situational factors with outcomes, the interpretation that these inputs do make a difference in outcomes seems justified, pending cross-validation studies.
 2. Where these correlations fluctuate from setting to setting and appear to be influenced by differences in situations, but still tend to correlate more highly with the outcome than do the situational variables, the interpretation that these inputs actually affect outcomes must be very tentative until confirming

evidence is found; however, there is at least a fair probability that they affect outcomes.

3. where these relationships clearly "go along with" and seem dependent upon differences in situational factors (such as advantaged community), it must be concluded that the possibility of the guidance input influencing the outcome has not been ruled out but that it seems very unlikely from the evidence.

B. If significant correlations are NOT found between inputs and outcomes:

1. where the other information available provides evidence of counter-influence to guidance efforts (such as more effort expended in schools where the situation is worst and poorest results may be expected), the best interpretation would probably be that guidance inputs may be effective but if so the effect is washed out;
2. where there is no evidence of counter-influence, it is still possible that such influences exist but were not measured; more evidence may be sought;
3. where the available information indicates that the presumed counter-influences do not exist, it is possible that:
 - (1) guidance efforts were directed at a limited number of students, so that a measure of relationship taken from a random sample is not appropriate;
 - (2) the instruments used were not sensitive enough to detect effects;
 - (3) there were no effects.

The argument that efforts were directed towards a few students is reasonable but not germane, since the purpose of the present study was to attempt to assess the "total impact" of the total guidance program on the population for which it is provided. Other studies have been made of the effects of specific efforts on specific students.

It is easy to "write off" negative findings as the result of poor measurement rather than lack of relationships. Certainly many of the measures used in this study are relatively simple and crude, although every effort was made to at least avoid bias in any direction, either in the instruments or in reporting the results. While there is undoubtedly some potentially valuable information that was not brought to light because of instrument weaknesses, there are also bits

of evidence throughout the study supporting the reliability of even some of the seemingly weakest measures such as the measure of training success. In any case, where the findings reported are negative, the burden of proof rests on those who would argue that certain relationships exist. If negative results prod others into devising and using more sensitive instruments and thus demonstrating effects, this study will have served a valuable purpose.

The major findings reported in the tables and the text are summarized in the following paragraphs.

1. The best guidance programs tend to be in schools where they are least needed. Well-established and well-supported programs with high levels of guidance activity, with relatively little time demanded for nonguidance functions, and with a high level of contact with the student body tend to be found in schools where students have good ability, come from advantaged homes in advantaged communities, and where the school climate encourages scholastic excellence.

Some argue that the most guidance effort is being expended where the poorest results may be expected, and that this situation will mask any effects that are present. To be sure, included in the present study were a number of large schools with good guidance programs in culturally disadvantaged areas of cities, but even taking that fact into account, our results do not support the view stated above.

2. In schools where the average ability is low and the school climate anti-academic, counselors tend to spend more time with "problem students." This is certainly understandable in that students in such schools are more likely to have adjustment problems. On the other hand, it would seem especially important in schools of this kind to have a strong enough guidance program to give the entire student body whatever benefits might accrue from contact with a good counselor, rather than keeping the counselor busy working with more deviant students.

3. While most guidance efforts are interrelated with situational factors, a few are relatively independent, especially the ones entitled "counselor image" and "superficiality of student-counselor contacts." These are factors that do not tend to show up any more in advantaged situations and good schools than in poorer situations.

4. If there is one guidance "input" that can with confidence be said to have an effect on hoped for outcomes, it is the personality of the counselor, as perceived by students and observers. The aspects of personality referred to here are warmth, acceptance, openness, respect for and interest in students and effectiveness in contacts with staff. This factor is related to satisfaction with guidance, good holding power, incidence of continued education, amount of help received from guidance programs (as reported a year after graduation by two different

groups of students), and, to a lesser degree underachievement, unrealistically high vocational aspirations, and self-concept (in one-counselor schools). All of these relationships are in the expected direction. None of the other factors measuring guidance effort come close to having the number and strength of relationships to outcomes that counselor image does.

5. Satisfaction with guidance depends primarily on how good the guidance program is, and how well it is supported. Satisfaction here means that the administration and the faculty feel that it is a good and helpful program, that students feel it is helpful to them personally and to students generally, and that two groups of former students, upon looking back, are able to check off many very specific kinds of help that they received while in high school. Thus, satisfaction is neither a simple molar judgment nor does it rely on any one source. In fact, the very great similarity in the kinds of help obtained by two different classes attests to the reliability of that scale as well as to the stability of perceptions of guidance programs over the period of a year and from different sources.

The significant relationships between satisfaction and the various aspects of guidance programs hold up in all of the subsamples, but they are especially pronounced in the sample of low-ability schools. In high-ability schools, satisfaction seems to be partly a function of personal and community advantage and a good school climate--circumstances that maximize the likelihood of achieving one's goals even with no help from guidance. In low ability schools, satisfaction is relatively independent of these other situational factors and heavily dependent upon a well-established and supported guidance program with high levels of guidance activity. It appears that while in advantaged situations the guidance program may receive credit properly assigned to happy chance, in low ability schools it must earn its keep.

Some have argued that satisfaction is a meaningless measure of guidance outcome, that we should find out whether students were "really helped" rather than whether they think they were helped. To be sure, guidance programs are not instituted in order that students may express satisfaction about them; but it does not follow from this that expressions of satisfaction and of kinds of help received, as measured here, are not worthy measures of outcomes in their own right. They are just as worthy as job satisfaction is a worthy measure of vocational success, along with other measures. One can indeed fool some of the people some of the time, but it is inconceivable that students generally do not know whether they received help in "finding out about college" or "getting summer employment" or "trying to decide on a career."

In brief, it is felt that satisfaction with guidance as measured here is a worthy index of good guidance outcome, and that the evidence clearly indicates satisfaction to be largely the result of high guidance effort from good guidance programs.

6. Aside from counselor image, measures of guidance efforts appear to have little if any relationship to the holding power of schools. Retention and attendance are related to smallness of school, good ability of students, advantaged circumstances and proximity to post-high school training. Getting a good counselor of the kind described earlier may help schools increase holding power. In addition, the current move to provide area vocational schools and community colleges may help.

7. High general and academic self-concept does not seem to be related to any aspect of guidance programs, or indeed of any measured aspect of the situation, not even family advantage. Only in one-counselor schools are there positive but modest correlations between guidance efforts and self-concept, but in these schools self-concept correlates more highly with advantaged circumstances (in which better guidance programs tend to be found). Thus, there is no evidence that what is done in guidance affects the overall self-perceptions of students; if anything, self-perceptions seem better where there is less contact with counselors; this too, is very probably a function of the situation.

8. Continuing education, like holding power, is not related to guidance program measures other than counselor image, but is related to ability, academic atmosphere, and other situational factors. In one-counselor schools, counselor image becomes a particularly strong related factor; it seems reasonable to hypothesize that a well-perceived counselor does indeed influence youngsters in such a way that more go on to school.

Since a good academic atmosphere is also definitely related to continuing education, it would seem worth while for counselors to consider how they might affect the climate of the school in that direction.

The amount of nonguidance work that counselors do also seems related to this outcome, especially in low ability schools. This may well be a function of some third unmeasured variable, but it does raise a potentially interesting question. Some of the nonguidance duties listed by counselors are duties that bring them out among students and into close contact with them. Is it possible that certain nonguidance functions actually provide opportunities for guidance, and are so reflected in the several places where "high nonguidance" is seen to be related to desirable outcomes?

9. In schools where present students report more and deeper contacts with their counselor (as well as good counselor image), former students recollect getting more kinds of help from the counselor. Furthermore, they recall more help if they attended low-ability schools than high ability schools, even though the guidance programs may not be as good.

10. In schools where the average ability is lowest, students are least vocationally mature and achieve least well for their own ability level. Overall achievement relative to ability is a direct responsibility of the instructional staff; this finding implies more about the quality of instruction in low-ability schools than the quality of guidance. Maturing attitudes toward vocation do, however, belong in the domain of concerns usually claimed by counselors; there is no indication that guidance has any effect here. Furthermore, since the counselor is also a test expert, and thus best able to measure and explain underachievement, it might be expected that he would discover and draw attention to this problem, exerting what influence he could to improve the instructional deficiencies implied.

11. In schools where the average ability is low, there is more tendency for students to have "unrealistic" vocational aspirations in both directions, shooting high and shooting low. While counselor image is somewhat related to less unrealistic high aspirations in high-ability schools, there is essentially no evidence that guidance has any effect on the realism of vocational aspirations. Since students report more contact with counselors on matters related to testing than on almost any other subject, one might perhaps expect the effect of counselor contact to show up these outcome measures. On the other hand, this is very probably one of those areas in which there is a strong counter-influence that would tend to hide the effects of any guidance effort--the tendency of lower-ability students to be less realistic in their vocational aims. Whatever the reason, the results here do not reveal probable guidance effects.

12. A year after from graduation, students still express satisfaction with their guidance programs in proportion to the amount of guidance effort and support to be found in the school, but satisfaction with their life situation seems totally unrelated to anything about their experiences with guidance. In fact, satisfaction with their lives relates to only one other measured variable--the average training success of students from that school. Neither variable is related to guidance factors.

13. The proportion of the senior class who are in post-high school training a year later appears to be mostly a function of ability and advantaged circumstances, as might be expected. It might also be expected that this proportion would relate to guidance, since vocational guidance is usually considered to be one of the areas of greater counselor competence; unfortunately, no evidence of effect was found.

14. Finally, a factor-analysis carried out for one-counselor schools turned up a few new "factors," or internally consistent scales, two of which may be of some special interest to counselors. Two measures of high school climate that originally had entered into the "academic atmosphere" scale broke up into two scales that seem to function differently, in one-counselor schools at least.

One, called here "academic press," consisted of "student press for scientism," "student press for intellectualism-competition," and the percent of students in college preparatory curricula. The other, here called "press for breadth of education" consisted of "press for estheticism-humanism" and the number of different subjects available to students. The second of these was an important predictor of several outcomes including good self-concept, holding power, achievement, and perception of counselor as helper. The former was not a good predictor of anything.

Attention is drawn to this finding, not only because of the possible importance of school climate as measured by "press for breadth" but also because school climate as measured by the total press factor, "academic atmosphere," also was related to a number of outcomes. There is clearly a suggestion here that counselors might find it valuable to obtain and to use measures of school climate, and to consider ways in which climate can be modified so as to improve the probability of desired outcomes. This concept of the counselor attempting to affect the total milieu rather than simply working with students who need help has been touched upon before and will be discussed more fully in the final chapter.

One input factor found in one-counselor schools was labelled "teacher-oriented guidance," since the variables loading into it were the number of years the counselor had previously been a teacher, and a negative loading from the amount of time spent in personal counseling. This is of interest because the loadings suggest that these two phenomena are very much related and also because the new factor was related to perception of the counselor as unhelpful, and to underachievement and under- and over-aspiration. The finding needs cross-validation, but if it holds up it has some implications for the continuing discussion within the profession as to the importance of teaching experience for counselors.

It should be noted that the lack of any evidence about relationships of counselor training and ability with the measures of outcome used here does not imply any lack of importance of these factors, but only that the present study did not attempt to evaluate the kind of training obtained by the counselor or his measured ability. This brief summary has touched the highlights of the material reported in the chapter but has by no means exhausted the possible interpretations of the data. It may also have overinterpreted at some points. The reader is invited to make his own analysis of the information contained in the chapter.

REFERENCES

1. Barrett-Lennard, G. T. "Therapy Response and Therapeutic Change," Psychological Monographs: General and Applied. 26, 43, 1963. pp. 1-36.
2. Bills, R. E. Manual for the Index of Adjustment and Values. Auburn, Alabama, 1958. 45 pp. Mimeographed.
3. Brookover, W., Patersen, Ann; Shailer, Thomas. Self Concept of Ability and Scholastic Achievement. Cooperative Research Project No. 845, Michigan State University, 1962.
4. Coleman, James S. Social Climates in High Schools. Cooperative Research Monograph No. 4. U. S. Office of Education (OE - 3316) Supt. of Documents. Washington D. C. 1961.
5. Crites, John O. "Measurement of Vocational Maturity in Adolescence." Psychological Monographs: General and Applied. 79, 2, pp. 3-86, 1965.
6. Harman, Harry H. Modern Factor Analysis. Chicago: University of Chicago Press, 1960.
7. McDill, E. L., et. al. Sources of Educational Climates in High Schools. Cooperative Research Project No. 1999. Johns Hopkins University, 1966.

Chapter 5

SELECTED ADDITIONAL FINDINGS

The major findings of this study were presented in Chapter 4. In Chapter 5 are given the correlations between most of the original variables from which the factor analyses in Chapter 4 were derived, and the results of stepwise regression equations calculated for 31 of the original outcome variables, using 54 input and situational variables as predictors. In addition, summaries are presented of selected correlations between the follow-up outcomes and guidance and situational variables, a comparison of the sexes on variables on which they differ, and significant relationships among categorical variables that could not be used in the correlational analysis. A section summarizing comments and reactions from students, drop-outs, graduates, and field workers completes the chapter.

Correlations of Outcomes with Situational and Guidance Input Variables

In Table 47 are given the correlations between 27 situational variables and 40 outcome variables. Only correlations equal to or greater than .27 are shown; all of these are significant at the .01 level, and make up about 25% of all of the possible correlations in the table. Table 48 is of the same nature, except that instead of situational variables, 32 guidance input variables are shown. Approximately 20% of the possible correlations in that table are significant at the .01 level.

It should be pointed out that certain variables were omitted from the tables. There were a number of situational variables that did not correlate significantly (at .01 level) with any of the outcome variables.¹ One situational variable which was omitted from Table 47, "amount of ability grouping," did correlate significantly with two

¹These situational variables were: changes in enrollment in recent years, percent of male teachers in the school, length of the typical class period, average number of years of teacher experience, local effort for education in mills, and five of the nine subscales measuring school climate. The four others are given in Table 47 as "press" scales.

TABLE 47
CORRELATIONS BETWEEN OUTCOME VARIABLES
AND SITUATIONAL VARIABLES, 84 SCHOOLS
 (Reported only if .27 or higher)

		SITUATIONAL VARIABLES																											
OUTCOME VARIABLES		Total No. of Significant Correlations for each outcome																											
			GI2,3,4	GI7	GI9	GI10	GI13	GI16	GI18	GI19	GI20	GI21	GI23	GI24	GI33	GI34	Expend.	T/P Ratio	Lib.	Town	MSAT	SS4T1	SS5T1	SS6T1	SS9T1	S2	S3	S4	S5
			Number of Seniors	% Advanced Degrees	Ave. Salary	No. of School Days	No. of Subjects	No. Special Classes	Achievement Recognition	Extra-Curric. Activities	No. School Facilities	Community Facilities	Income Level	% in College Prep.	Nearness to College	Nearness to Trade School	Per Pupil Expenditure	Teacher-Pupil Ratio	No. Vol. in Library	Size of Town	Ave. Score on MSAT	Student Press for Scientism	Fac. Press for Vocational	Stud. Press for Intell.-Compet.	H.S. Press for Esthet.-Human	Education of Father	Education of Mother	Family Income	No. of Books in Home
55	Lack of Dropouts, Boys	2											.38	.28													*		*
56	Lack of Dropouts, Girls	3											.33	.33							.31						*		*
57	Juvenile Court Cases	2						.31				.28															*		*
58	Emotional Problems	9	.32		.33	.30	.30					.41							.36	.30						.29	*	.27	*
59	% Boys to College	12		.32		.27							.50	.29	.27	.36			.29		.47			.36	.30	.40	*	.36	*
60	% Girls to College	11	.29	.36						.33	.28		.49						.35	.32	.52			.41	.38	.37	*		*
61	% Boys to Voc. School	0																								*		*	
62	% Girls to Voc. School	1																.31								*		*	
66	Admin. Satisfaction with Guid.	13	.40	.33	.47	.35	.35			.42	.34	.39				.31		.36	.45	.36						.37	*		*
72	Help for Teachers from Guidance	3								.41											.34				.38		*		*
	Teacher Satisfaction with Guid.	7			.32					.47				.30							.31	.33			.38	.29	*		*
70A	% Who Would See Counselor, Voc. Problem	0																								*		*	
71A	% Counselor, School Problems	18	.39	.27	.41	.43	.44	.33		.39		.40		.31	.39	.32		.27	.48	.39				.28	.36	.28	*	.31	*
72A	% Counselor, Personal Problem	1										.28														*		*	
71B	% Receiving Help "In Depth"	0																								*		*	
72	Ave. Judged Helpfulness	9					.27	.29		.40	.31	.31				.28				.37				.39	.38		*		*
73A	Ave. Score on Staff Helpfulness to all Students	20	.46	.50	.49	.40	.51	.40	.43	.54	.39	.57		.33	.44	.45		.35	.55	.49				.27	.40	.40	*	.37	*
73B	Ave. Score on Counselor Helpfulness to all Students	18	.37	.37	.44	.41	.38	.36	.40	.55		.43		.33	.40	.37		.32	.46	.38	.28			.34	.30		*		*
74C	Prop. of Top 15% to College, 1965	10			.29	.28					.31			.52					.31		.53	.36			.33	.35	*	.27	*
75C	Prop. of Bottom 15% to College, 1965	16	.39	.34	.31		.28			.36	.33			.40	.34	.35			.37	.30	.43	.34			.31	.31	*	.36	*
76C	Prop. of Top 15% Planning College, 1966	8			.31	.30						.28	.35	.36							.39	.33				.30	*		*
77C	Prop. of Bottom 15% Planning College, 1966	21	.58	.44	.42	.42	.50		.39	.47	.43	.43		.48	.29	.28		.36	.47	.50	.56	.35		.39	.40	.49	*	.43	*
78	% Attendance	2										.29						.30								*		*	
79T2	Academic Self-Concept	6	.27																.27				.37		.36	.38		.45	
80T2	Importance of Grades	1							.28																				
81	% Grads Who See Couns., Voc. Problems	1								.31																			
82	% Grads Who See Couns., School Problems	21	.44	.35	.41	.55	.48	.36	.29	.46	.37	.48		.26	.39	.41			.48	.40	.27			.27	.43	.38		.38	.33
83	% Grads Who See Couns., Personal Problems	1						.31																					
84	Helpfulness of Guid. (Grads, Level 2)	0																											
85	Helpfulness of Guid. (Grads, Level 3)	0																											
86	Helpfulness of Guid. (Grads, Level 4)	3												.30							.29		.27						
87	Total Kinds of Help (Grads)	0																											
88A-	Underachievement, Tested	1																											.28
88A-	Underachievement, Class Work	9		.31	.33								.36	.35							.49			.29	.49	.38		.34	
89S+	Shooting Low, Relative to Ideal	4		.28										.36							.30						.39		
89S-	Shooting High, Relative to Ideal	0																											
90V-1	Self Concept	1																						.28					
91GCT	Unrealistically High Aspirations	2							.27													.27							
92DI-M	Vocational Maturity	3											.29	.28							.40								
93	Ave. No. Extra-Curricular Activities	10	.49		.39	.28	.56	.45		.36		.42						.52		.45					.33	*		*	
Total No. of Sig. Correlations for each Situational Variable			11	11	13	11	10	8	6	13	8	13	5	17	7	9	1	8	13	10	16	5	2	9	14	14	3	8	4

No correlation coefficients calculated for these cells.

55

146

outcomes although there was some question as to whether it had been interpreted alike by all schools. The correlations were .30 with administrative satisfaction with guidance, and .28 with students' perception of the amount of guidance provided by the teaching staff.

Similarly, a number of guidance input variables were omitted because they did not correlate significantly with any of the outcomes.¹ Again one variable omitted from the table, amount of teacher-counselor cooperation as seen by the counselor, did correlate .31 with teacher satisfaction with guidance. It appears that in schools where the counselor sees the teachers as cooperative, the teachers feel that the counselor and the guidance program are helpful.

A number of outcome variables were left out of the table because they did not have any correlations as high as .27 with either situational or input variables. Most of these outcomes were nevertheless used in the factor-analysis, because it was felt that even if they were not in themselves related to any measure of guidance effort or the setting in which guidance was carried out, they might contribute something to the more unified and less redundant scales derived by factor analysis. The outcomes not included in Tables 47 and 48 were:

Discrepancy between what the graduates thought they would be doing a year after graduating (as recalled at the end of that year) and what they actually were doing at that time (there were only a few such discrepancies; the recollections were probably strongly influenced by what they were actually doing)

Discrepancy between the field (not level) of work the students would ideally prefer and the one they actually planned to enter

Acceptance of self as measured by the second part of the Index of Adjustment and Values (Adjective Scale)

Training success (of the group that graduated in 1965. The second group is reported later in this chapter)

Low vocational goal relative to ability (A.G.C.T.)

Proportions of the top and bottom 15% of the classes of 1965 and 1966 going or planning to go to vocational school.²

¹These inputs were: recent changes in the guidance program; the setting of goals by the administrator, the amount of guidance done by teachers (as seen by the teachers and counselors); adequacy and use of student records; uses of tests; number of years the counselor had been a teacher, been in the current school, and in work other than teaching or counseling; counselor's stated philosophy; number of counselor's nonguidance duties; proportion of counselor time spent in providing information, doing orientation scheduling, career planning; proportion of time spent with self-referred and counselor-scheduled students.

²Actually the proportion of the low 15% of the class of 1966 planning to go to vocational school was inadvertantly left out but did correlate -.32 with scholastic aptitude and -.40 with average family income.

Interested readers may examine Tables 47 and 48 in detail; only some of the salient features will be noted in the summary statements below.

1. It is evident that the magnitude of the correlations is generally rather small. That this is so should not be surprising; it verifies the expectation that differences in the rather complex personal-social variables entitled "outcomes" result from many many factors, none of which is dominant. Guidance programs may be installed in order to reduce dropout rate, help students select appropriate post high-school training, foster student self-confidence, and the like, but it would be unrealistic not to expect these outcomes to be affected by a host of other influences as well--from within the student and from his peers, his home, his neighborhood, his geographic location. The question to be considered is not whether the predictors determine the outcomes but the degree to which they are related to and thus possibly have some influence on the outcomes.

2. The redundancy of much of the information in the tables is also evident. Some of the variables were measured in several ways; in such instances it is to be expected that the measures will not be independent.

3. The situational variables which are significantly related to the largest number of outcome variables¹ tend to be the ones that also loaded most heavily into the major factors and were therefore used in obtaining the scale scores for the factors given in Chapter 4. Among these situational variables are: number of seniors, number of subjects, number of days in the school year, extra-curricular activities, teacher salaries, and other measures related to size of school; family education and income, community facilities, and similar evidences of family and community advantage; college aptitude, number of students in college preparatory courses, school press, and similar indicators of academic climate. The four school climate scales have some 30 significant correlations with outcomes.

4. From Table 48 it may be seen that the input variables that relate to the largest number of outcomes are about equally divided between personal attributes and activities of the counselor, on the one hand, and attributes of guidance programs on the other. The major personal factors are: average score on the "counselor image" inventory, number of professional organizations to which the counselor

¹The total number of outcomes with which each situational variable correlated significantly is given in Table 47, and conversely the total number of situational variables with which each outcome correlated. These totals between input variables and outcomes are shown in Table 48.

belongs, and how he allots his time to various students and activities. Such variables as years of experience and adequacy of certain common guidance functions (such as placement, maintaining occupational information files) do not relate to many outcomes.

The program variables which correlate with most outcomes are student-counselor ratio, longevity of the program, and salary budget. These are the very indices of guidance that are quite generally thought to be appropriate measures of minimally adequate guidance programs.

5. The outcome variables that were related to the largest numbers of situational variables were those having to do with post high-school training and with perceived helpfulness of the counselor and of the faculty.

6. Outcome variables that are related to the largest number of guidance program inputs tend to be the same outcomes that also relate to many situational factors, with some exceptions. Measures of satisfaction tend to be more related to guidance programs, while outcomes related to class work, such as underachievement, number going to college, and academic self-concept tend to correlate more highly with situational than input variables.

7. Participation in a large number of extra-curricular activities may or may not be a desirable kind of student behavior, but it is mentioned in the literature as a possible objective of guidance efforts, and is sometimes considered in granting scholarships and other kinds of recognition, and was therefore included among the outcome variables. The figures in Tables 47 and 48 indicate that the number of activities is inversely related to the size of the school and to the amount of guidance effort carried on in the school. This finding probably reflects the situation in very small schools with no guidance or barely minimal guidance programs, in which there are so few seniors to be on athletic teams, the school paper and annual, choirs, and other activities, that they tend to participate in many more than is typically possible in a large school.

8. The large number of relatively high correlations between the kinds of help provided by the entire school staff to students (item S23A in Table 48) and guidance inputs may indicate some tendency for the staff to be drawn into active guidance programs or at least for staff to be perceived as helpful where there is a good guidance program.

Best Combinations of Predictor Variables for Selected Outcomes

In Table 49 are given the four to six predictors for each of 31 outcomes which best predicted that outcome, as determined by the stepwise regression method described in Chapter 4. They are numbered in

the table in the order in which they were added to the equation, and the cumulative multiple correlation is given after each step.

Table 49

Best Combination of Predictor Variables
for 31 Outcomes (all 84 Schools)

Outcome Factors	Multiple R	Predictor Variables (Minus sign means negative loading. Cumulative R after each variable) (Guidance Inputs underlined)
I. General Satisfaction With Guidance		
A. Teacher satisfaction with guidance	.69	1. <u>Student-counselor ratio</u> (.50) 2. <u>Number of extra-curricular activities available</u> 3. <u>Rating of counselor (field workers)</u> (.63) (.57) 4. <u>Nearness to vocational school</u> (.65) 5. <u>Group guidance activities</u> (.67) 6. <u>Placement activities</u> (.69)
B. Administrative satisfaction with guidance	.75	1. <u>Number years guidance program in school</u> (.61) 2. <u>No. years NDEA approved program</u> (.67) 3. <u>Improvements in program recently</u> (.71) 4. <u>Number of parent contacts</u> (.73) 5. <u>Rating of counselor (field workers)</u> (.75)
C. Amount of help received from counselor	.82	1. <u>Counselor score (student rating)</u> (.66) 2. <u>Number years guidance program in school</u> (.74) 3. <u>Rating of counselor (field workers)</u> (.76) 4. <u>Percent of students who had worked with counselor</u> (.78) -5. <u>Percent time counselor see violators</u> (.82)
D. Help from guidance program to students in general	.81	1. <u>Salary budget for guidance</u> (.60) 2. <u>Percent of students who had worked with counselor</u> (.68) 3. <u>Community facilities available</u> (.74) -4. <u>Percent counselor time on nonguidance</u> (.79) 5. <u>Rating of counselor (field worker)</u> (.81)
E. Proportion of students receiving counseling "in depth."	.71	1. <u>Ave. depth of reasons for seeing counselor</u> (.58) 2. <u>Amount of teacher guidance effort</u> (.63) 3. <u>Ave. total time spent with counselor</u> (.66) 4. <u>Amount clerical help for guidance workers</u> (.69) 5. <u>Adequacy of testing program</u> (.71)

Table 49 (continued)

Outcome Variable	Multiple R	Predictor Variables (minus sign means negative loading. Cumulative R after each variable)
II. Perception of Counselor as the Most Helpful Person to go to:		
A. With vocational problems	.72	1. <u>Counselor score</u> (student rating) (.49) 2. <u>Percent--worked with counselor</u> (.55) 3. <u>Average number times counselor seen</u> (.64) 4. <u>Student-counselor ratio</u> (.67) 5. <u>Father's educational level</u> (.72)
B. With school problems	.69	1. <u>Salary budget for guidance</u> (.48) 2. <u>Counselor score</u> (student rating) (.58) 3. <u>No. days in school year</u> (.64) 4. <u>Average total time with counselor</u> (.66) 5. <u>Student-counselor ratio</u> (.69)
C. With personal problems	.50	1. <u>Student-counselor ratio</u> (.34) 2. <u>Uses made of occupational information</u> (.41) 3. <u>Counselor score</u> (student rating) (.46) 4. <u>Adequacy of testing program</u> (.48) 5. <u>Average family income</u> (.50)
III. Perception of Self		
A. Self-concept (LAV-1)	.58	-1. <u>Average total time with counselor</u> (.28) 2. <u>Student press, intellectualism-competition</u> (.37) -3. <u>Number of subjects available</u> (.46) 4. <u>Nearness to college</u> (.55) 5. <u>Amount of follow-up activity</u> (.58)
B. Acceptance of self (LAV-2)	.58	1. <u>Student press, intellectualism-competition</u> (.22) -2. <u>Number of kinds of achievement recognition</u> (.33) -3. <u>Student press for scientism</u> (.40) 4. <u>Percent counselor time spent counseling</u> (.47) -5. <u>Amount of teacher guidance effort</u> (.52) 6. <u>Nearness to college</u> (.58)
IV. School Achievement, Adjustment, Retention		
A. Percent under-achievers, (tested ach. below tested ability for this group)	.55	-1. <u>Average family income</u> (.29) 2. <u>Student press, estheticism-humanism</u> (.39) 3. <u>Changes in guidance</u> (.44) -4. <u>Father's educational level</u> (.52) 5. <u>Average no. times counselor seen</u> (.55)

Table 49 (continued)

Outcome Variable	Multiple R	Predictor Variables (minus sign means negative loading. Cumulative R after each variable)
B. Percent repeating courses	.49	1. No. of school facilities for students (.21) -2. Average ability (M.S.A.T.) (.35) -3. Family income (.41) 4. No. community facilities available (.45) 5. No. of kinds of achievement recognition (.49)
C. Average no. extra-curricular activities in which students participate	.67	-1. No. of subjects available (.56) 2. Teacher-pupil ratio (.61) -3. No. of school facilities for students (.64) -4. No. of special classes (.67)
D. Percent of students known to have violated laws and been apprehended	.52	1. No. of special classes (.31) 2. Amount of placement activity (.39) 3. <u>Percent of counselor time spent with violators of school rules</u> (.45) 4. <u>Average depth of reasons for seeing counselor</u> (.49) -5. <u>Average total time with counselor</u> (students in general (.52)
E. Percent of students known to have emotional problems	.60	1. No. of community facilities available (.41) 2. <u>Average depth of reasons for seeing counselor</u> (.47) -3. <u>Adequacy of student records</u> (.52) 4. <u>Nearness to college</u> (.55) 5. <u>Counselor score</u> (student rating) (.60)
F. Lack of dropouts, boys	.59	1. Average income level (.38) -2. <u>Clerical help available</u> (.45) 3. <u>Percent in college prep. programs</u> (.52) -4. No. of subjects offered (.57) -5. <u>Depth of reasons for seeing counselor</u> (.59)
G. Lack of dropouts, girls	.61	1. Average income level (.33) 2. Percent in college prep. (.44) -3. <u>Percent counseling time working with personal problems</u> (.53) -4. Average teacher salary (.57) 5. Nearness to vocational schools (.61)
H. Percent attendance (relative to perfect attendance)	.56	-1. Availability of outside referral (.30) 2. <u>Percent who have seen counselor</u> (.40) 3. <u>Rating of counselor</u> (field workers) (.46) -4. <u>Student-counselor ratio</u> (.50) 5. Teacher-pupil ratio (.54) 6. Average ability (.56)

Table 49 (continued)

Outcome Variable	Multiple R	Predictor Variables (minus sign means negative loading. Cumulative R after each variable)
V. Continuing Education		
A. Percent on to college, boys	.66	1. Percent in college prep. curriculum (.50) 2. Amount teacher guidance effort (.56) 3. Counselor rating (field workers) (.59) -4. Board of Education support for guidance (counselor view) (.62) 5. Student press for intellectualism, compet. (.64) 6. Father's education (.66)
B. Percent to college, girls	.68	1. College aptitude (.52) 2. % in college prep. programs (.56) -3. % counselor time on nonguidance duties (.60) 4. Average counselor score (by students) (.63) 5. Father's education (.65) 6. Student press, scientism (.67) 7. Student press, intellectualism (.68)
C. Percent to vocational school, boys	.53	1. Average counselor score (by students) (.31) 2. Percent time on nonguidance duties (.38) 3. Percent in college prep. curricula (.41) -4. Student press for scientism (.46) 5. Adequacy of testing program (.49) -6. No. days in school year (.53)
D. Percent to vocational school, girls	.59	1. Teacher-pupil ratio (.31) 2. Counselor score (by students) (.45) -3. Student-counselor ratio (.51) -4. Counselor time actually counseling (.55) 5. Family income level (.59)
E. Proportion of top 15% of class of '65 going on to college	.67	1. Average scholastic aptitude (MSAT) (.53) 2. Percent in college prep. (.59) -3. Administrative cooperation (as seen by counselor) (.63) 4. Teacher guidance effort (.65) 5. Student press for scientism (.67)
F. Proportion of bottom 15% of class of '65 going to college	.65	1. Salary budget for guidance (.45) 2. Scholastic aptitude (.56) 3. Nearness to college (.58) 4. No. professional organizations counselor belongs to (.62) 5. Years of counseling experience (.65)

Table 49 (continued)

Outcome Variable	Multiple R	Predictor Variables (minus sign means negative loading. Cumulative R after each variable)
G. Proportion of top 15% of class of '66 planning to go to college	.60	1. Average scholastic aptitude (.39) 2. Number years school has had guidance program (.46) -3. Amount clerical help available (.52) 4. Family income (.57) 5. % who had seen counselor (.60)
H. Proportion bottom 15% of class of '66 planning to go to college	.73	1. Size of senior class (.58) 2. Average scholastic aptitude (.66) 3. Kinds of achievement recognition (.69) 4. No. of special classes (.73)
VI. Vocation-related considerations		
A. Vocational maturity score (VDI--M)	.60	1. Scholastic aptitude (.40) -2. High school press for estheticism-humanism (.45) 3. Adequacy of guidance facilities (.48) -4. Number years of guidance in school (.52) 5. Size of town (.56) 6. Student press for intellectualism-competition (.60)
B. Congruence in <u>field</u> , ideal vocational and actual choice	.38	-1. Percent time counselor spends on personal problems (.20) 2. Student press for intellectualism-competition (.26) -3. Number of parent contacts (.31) -4. Percent time on nonguidance duties (.35) -5. Changes in guidance (.38)
C. Low aspirations, relative one's ideal choice of vocation	.52	-1. Percent in college prep. programs (.36) -2. Amount of teacher guidance effort (.41) 3. Adequacy of testing program (.45) -4. Number teachers with advanced degrees (.50) 5. Average counselor score (by students) (.52)
D. Low aspirations, relative to measured ability	.46	-1. Counselor time in personal counseling (.23) -2. Adequacy of counseling facilities (.32) -3. Amount of clerical help (.39) -4. Percent in college prep. programs (.42) -5. Counseling time spent with violators of school rules (.46)
E. High aspirations, relative to measured ability	.55	-1. Adequacy of testing program (.28) -2. Scholastic aptitude (.35) 3. Size of senior class (.45) -4. Nearness to college (.51) -5. Kinds of achievement recognition (.55)

Guidance input variables in Table 49 are underlined in order to distinguish them from situational variables. The exact order in which the variables enter the equation should not be overstressed, because very minor differences in relationships may determine that order. The major interpretation is that these few variables taken together form the best predictive combination for each outcome. It may also be noted that variables can and do act as important predictors even if they do not themselves correlate highly with the given outcome; thus, variables appear in Table 49 that were omitted from Tables 47 and 48.

Another index of the relative utility of the various predictors, not shown in Table 49, but tabulated and reported below, is the frequency with which variables are to be found among the first ten predictors of the 31 outcomes. The four situational variables which were to be found among the top ten predictors most frequently were as follows: (actual frequency out of a possible 31 given in parentheses)

1. Minnesota Scholastic Aptitude Test (14)
2. Percent of students in college preparatory curricula (12)
3. Student press for intellectualism-competition (9)
4. Average family income (9)

The four situational variables appearing least frequently were:

1. Number of extra-curricular activities available (2)
2. Number of days in the school year (3)
3. Size of town (3)
4. Percent of teachers with advanced degrees (3)

It thus appears that outcomes can best be predicted from measures of student ability, family advantage, and school atmosphere. Size, and various indices of size do not appear to be good predictors even though it was found earlier that indices of size correlate with outcomes. This finding would suggest that it is not size per se but other factors which go along with size that influence outcome--possibly such matters as better staff, better facilities, better libraries.

The five guidance input variables that appear most frequently among the top ten predictors are the following:

1. The average score on the "counselor image" scale--the scale used by students to indicate how the counselor relates to them (13)
2. The percent of time the counselor spends in personal counseling (12)
3. The length of time the guidance program has been approved under NDEA standards (12)

4. Student-counselor ratio (10)
5. Number of years the school has had a formal guidance program (10)

The four guidance input variables that appear least frequently as predictors are the following:

1. Number of years the counselor has been a counselor (2)
2. Board of Education support for guidance (counselor view) (2)
3. Amount of follow-up activity (2)
4. Availability of referral agencies (3)

Thus, the best two predictors are indices of counselor personality and behavior, and the next three are rather standard measures of adequacy of guidance programs. Perhaps the most unexpected finding is the lack of predictive importance of counseling experience.

From Table 49 it may be seen that more of the predictors are guidance input variables (underlined) than situational variables, but that the ratio varies widely from outcome to outcome. In the first group of outcomes relating to satisfaction with guidance, 24 out of 26 predictors are guidance inputs. In the next (and related) category, perception of the counselor as the person to seek out for various kinds of help, 12 out of 15 predictors are guidance inputs. It is evident that guidance efforts much more than situational influences determine the subjectively judged value of guidance.

Those outcomes grouped together as being related to vocation also appear to be slightly more predictable from guidance input variables than situational ones (14 to 12), but the rest of the groups go the other way. It would appear that unrealistically low aspirations relative to ability are affected by guidance efforts but that unduly high aspirations are more a function of low ability, size of school, and other situational factors. However, the outcomes in this group are generally not well predicted even by the best combination of predictors, as the relatively low multiple correlations attest. In the areas grouped together as relating to school and to continuing education, situational variables predict better than guidance input variables.

It is not enough to note that certain predictors are related to outcome variables; the directions must also be considered, and in a few cases the direction is the opposite of what might have been hoped for. For example, the less average time the students spent with the counselor, the better did the self-concept tend to be. This can hardly mean that time spent with the counselor lowers the self-concept. It seems more reasonable to assume that in schools where the average self-concept is low there are also some behavioral signs of a need for counseling, and that counselors respond to such signs. All that can be said from this study is that, if this is so, the counseling done in such schools does not appear to be able to overcome the low self-concepts.

Another unexpected relationship is the number of times the counselor has been seen, on the average, which "predicts" greater underachievement. Again the explanation above seems most appropriate. Still another is the situation in which more counselor time with violators of school rules "predicts" a larger proportion of students picked up for violating laws. While such relationships as those given above do nothing to demonstrate the effectiveness of guidance, they may at least indicate counselor attempts to alleviate certain kinds of problems found in the school.

In Chapter 4 it was reported that the best established, best supported guidance programs tend to be found in "advantaged" schools. The findings above, while they do not contradict the earlier statements, seem to offer some encouragement. It may be that even if the guidance programs tend to be less strong and well supported in schools with low student self-esteem, underachievement, and/or high incidence of law-breaking, at least the counselors in such schools are attempting to cope with these problems--without much success, apparently.

Many more observations could be made of the details of Table 49, but in general it supports and extends what was found in Chapter 4, providing some of the details that were lost in the process of developing summary scale scores. An example is in the category called "general satisfaction." From Table 49 it may be ascertained that administrative satisfaction depends largely on longevity, approval under NDEA, and recent improvements in the program (and, interestingly, the number of parent contacts made by the counselor). Teacher satisfaction, on the other hand, seems to be more a function of adequacy of counseling staff, activities by the counselor, and extraneous factors such as the number of extra-curricular activities. Finally, student-judged helpfulness is based primarily on how the counselor is perceived and how he spends his time. Where counselors spend relatively much time in nonguidance functions or in working with violators, students in general feel they get less help. Other "factor" relationships from Chapter 4 may be similarly examined.

Summary of first two sections

1. The situational variables found to be related to outcomes clearly reflect the basic factors found in chapter four--size and all that goes with it, advantaged location and family, ability, and an academic atmosphere or press for humanistic and academic excellence. When the best combinations of predictors are chosen from among these variables, size-related variables are least useful. It may be that they all account for the same portion of the variance in outcomes, so that when one appears in the prediction formula the others add nothing to it. Or it may be that size correlates with outcomes not because it affects outcomes but because it always tends to be present along with other factors that affect outcomes such as better facilities, teachers, and guidance programs.

2. Guidance program variables that relate to outcomes fall into two categories--counselor attributes and actions, and program attributes. In the former category, the perceived personality of the counselor, the time he spends in counseling and especially in personal counseling, in working with violators of rules, in working with referrals from the staff, in nonguidance activities, as well as the professional organizations to which he belongs seem most important both in number of significant correlations and number of predictions. In the second category, the variables having most correlations with outcomes are longevity and support of the program and adequacy of staff, along with adequacy of certain functions such as collection and use of occupational materials, adequacy of testing, amount of follow-up activity and the like.

It may be equally interesting to note the variables that do not relate to outcomes; examples of such variables are the adequacy of student records and the amount of experience the counselor had in teaching and in other kinds of work.

3. The outcome measures that proved least predictable were training success, the proportions of the top and bottom of the classes going to vocational schools, self-acceptance, and the various discrepancy measures relating to vocational aims.

4. Since both guidance program variables and situational variables correlate with outcomes, the question arises as to which of these kinds of variables affect outcomes more. There is at least some evidence in the tables in this chapter pointing to the greater influence of guidance programs; the fact that guidance variables outweigh situational variables in the regression equations, and the fact that size itself does not predict well, indicating that the real predictors are the advantages which go with size--including better-established and supported guidance programs.

Correlations of Follow-up Outcomes with Predictor Variables

The significant (.27 or higher) correlations between predictor variables and four follow-up outcomes are given in Table 50. The outcome measures in Table 50 were obtained from the class of 1966, one year after their graduation; this was the class on which most of the original data were obtained while they were seniors. From the table it is evident that once again measures of satisfaction with guidance are the most predictable outcomes.¹ Satisfaction with

¹Satisfaction with guidance as seen in retrospect a year later also correlated .41 with administrative satisfaction and .36 with teacher satisfaction the previous year.

Table 50

Correlations of Four Follow-up Outcome Variables with Predictors

Predictors	Satisfaction with Present Situation	Total Kinds of Help Received	Overall Satisfaction With Counselor	Percent in Training
Average scholastic aptitude (MSAT)				.30
Average family income	.27			
Nearness to vocational school	.27			
Counselor score (by students)		.38	.50	
Percent of class who had worked with counselor		.35	.44	
Board of education support (counselor view)		.31	.34	
Administrative cooperation (counselor view)			.34	
Student-counselor ratio			.39	
Average total time spent with counselor			.36	
Number years program has been NDEA approved			.36	
Counselor time spent on personal problems			.34	
Number years the program has been in the school			.28	
Number professional organizations of counselor			.28	
Number years counselor experience				.30

one's present situation appears to be a matter unrelated to the guidance inputs measured here, and the percent who actually ended up in training is not much related to guidance.¹

Another measure, average success in training, by school, of those who were in training, was not significantly related to any guidance program or situational variable. However, when the 500 or so reports on training success of individual students were correlated with other variables it was found that training success did correlate with the

¹The percent of the class which actually was in training a year later correlated .39 with the proportion of the bottom 15% of the class who had planned to go into training.

variables given below despite the very wide spread in difficulty and types of training:

- .33 with the Army General Classification Test
- .30 with the Minnesota Scholastic Aptitude Test
- .31 with the Iowa Test of Educational Development, Test 5, Social Studies
- .29 with the Minnesota English Test
- .32 with Academic Self-Concept
- .21 with the scale "importance of academic success"
- .18 with vocational maturity as measured by the Vocational Development Inventory

Success in training is, then, clearly related to measures of ability and of achievement, as well as to measures of academic self-concept and to vocational maturity. Once again the stability of the simple "success in training" scale is evidenced, but once again it is apparent that success in training one year after high school is not predictable from the measures of guidance and guidance efforts used in the present study.

Satisfaction with one's present situation, when considered individually rather than as a school average, had modest correlations (.15 to .18) with the following measures which reflect attitudes toward the self (the self-oriented measures were taken a year before the "satisfaction with situation" measure): self-concept and self-satisfaction as measured by the Index of Adjustment and Values; academic self-concept, and importance of academic success, as measured by the Michigan State scales.

Like success in training, satisfaction with life a year after high school is not predictable from the measures of guidance effort used in this study. In fact, about the only measures taken a year later that do relate to guidance are expressions of satisfaction with the guidance program and the counselor, and recalled ways in which the guidance program was felt to have been of value.

Sex Differences

The possibility was considered that the relationships between guidance variables and outcomes might be different by sex; accordingly, differences were checked and a few significant differences found, as shown in Table 51.

In addition to Table 51, chi-square tests of certain categorical data revealed three differences. In indicating whom they would go to see with personal problems, boys tended to prefer either no one or the counselor in larger numbers than did girls, while girls

Table 51

Variables in Which the Sexes Differ in Average Score				
Variable		Mean	Standard Deviation	"t-value"
Minnesota Scholastic Aptitude Test ¹	Female	36.63	14.75	3.29
	Male	33.72	14.54	
High School Rank ²	Female	59	not	not appropriate
	Male	47	appropriate	
Self-Concept (IAV-1) ³	Female	187.54	21.21	3.30
	Male	183.29	21.14	
Kinds of help students obtain from school staff	Female	6.04	2.26	3.16
	Male	5.60	2.40	
Number of extra-curricular activities	Female	5.53	2.55	7.28
	Male	4.46	2.49	
Discrepancy between ability and occupational choice, in stanines, where choice is higher than ability ⁴	Female	1.02	1.32	3.76
	Male	0.79	1.13	

¹The males were slightly higher on the A.G.C.T., difference not significant

²Although the females were slightly higher on the two achievement tests, the differences were not significant

³Mean score for the sexes was the same on self-acceptance (IAV-2)

⁴Males had a slightly larger discrepancy in the other direction, indicating some tendency for girls to "overshoot" relative to ability, and boys to "undershoot."

preferred either a peer or a member of the family in larger numbers. (Chi-square was 21.89, probability less than .01)

Relatively more boys would prefer to go to a counselor of their own sex, while relatively more girls either had no preference or preferred a counselor of the opposite sex. (Chi-square was 18.88, probability less than .01)

In the reports regarding training success, relatively more girls were checked as having outstanding or above average records in training, and relatively more boys as average or below. (Chi-square was 16.74, probability less than .01)

These few differences between the sexes, while interesting, did not appear to indicate the necessity for separate studies by sex. As has been found in other studies, girls tend to do better in high school grades and, in this case, in post high school training as well, but when achievement is measured by tests the differences

disappear. (Footnote No. 2, Table 51) Girls also did better on a scholastic aptitude test based heavily on vocabulary knowledge, but not on a more general ability test which included arithmetic and space visualization. Girls indicated more favorable pictures of themselves on an adjective checklist, but not more acceptance of themselves as they are. Girls take part in more extra-curricular activities and feel that the school guidance programs are helping students in more ways than do boys. With respect to the rest of the variables there were no differences significant at the .01 level.

Examination of Certain Categorical Variables

Information was obtained on such variables as the sex, marital status, training institution, and undergraduate major of the counselors, as well as on other variables which could only be categorized or were more appropriately categorized than scaled (as for example counselor statements of philosophy and administrator statements about participation in setting goals of guidance).

Chi-square analyses were carried out on the categorical variables and eta coefficients calculated between categorical and linear data, but the results did not add much to what had already been found out in the major analyses.

One problem was that in trying to assess the impact of the total guidance program in multi-counselor schools, individual counselor data could not be interpreted meaningfully unless it could be averaged. There was no way to assess the possible influence of different training institutions when the several counselors came from different schools. Using only those institutions with one counselor or where the personal information was the same for the two or more counselors, analyses were run with the following results:

1. The training institution was found to be significantly related to the time the counselor spends in personal counseling.
2. The undergraduate major of the counselor was possibly (.05 level) related to the number of students who perceived the counselor as a person to see with school problems.
3. Counselor statement of philosophy was significantly related to "press for vocationalism."

There were few other findings. One question concerned the type of residential areas in which typical students live; this variable was related to the number of emotional problems reported, teacher satisfaction with guidance, counselor score, the proportion of the low 15% of the class going to college, the number who would go to the counselor with school problems, and also to measures of school and community facilities of all kinds. All of these relationships

could have been predicted from the major findings, as could other relationships that are basically a function of size (number of counselors, type of counselor assignment, number of grades receiving guidance, etc.)

One other finding may be of some interest. The degree to which the administrator indicated that he was involved in setting the goals for his guidance program related significantly to only one variable-- administrative satisfaction with guidance! A study of the chi-squares and etas did not reveal other information which adds significantly to the previous findings.

Field Workers' Observations and Impressions

The field workers in addition to making an overall rating of the counselor which was coded and calculated along with other input variables (see Chapter 4) were asked to complete eleven incomplete sentences related to guidance programs and the study itself. They also were asked to make notes after each school visit covering all aspects of the school which might have some impact upon the guidance program. They expanded upon the data collected from the various instruments or recorded significant remarks made by students, teachers, counselors or administrators which might shed further light upon the guidance program and its impact on students. The topics covered and in-depth quality of observation varied from worker to worker. While covering many topics some focused on the nature and quality of the occupational literature, career planning units and related organized school activities, others stressed the unmet counseling needs of students or the relationships between student and counselor, teacher and counselor or parents and the counselor. The value of their observations and impressions might be inferred from the factor loading of the field workers' overall rating of the counselor to the input factor, I-5 (see Table 34 page 90) Good Counselor Image.

Some of their impressions and observations are included here to further clarify some points and to reveal the personal flavor of the study which came through so many times to the staff who personally contacted hundreds of students, teachers, principals and counselors.

Counseling

In observing the student-counselor relationships in one school a field worker wrote--"The students who have personal problems feel especially drawn to her . . . the way she speaks to each student you can feel a warmth there."

Another observed--"This school seems to be . . . counseling as it was intended, all three counselors were happy, outreaching, comfortable, and very enthusiastic about their work . . . most of the students seemed well aware of the work of the counselor and spoke of him as a friend."

Not so positive was this observation of another school--"It appeared that the guidance department did more scheduling than counseling. The counselor would talk with a pupil with the door open and other children sitting just outside . . . (it was) a sort of assembly line procedure . . . Mr. _____ didn't seem to have an interest in his work. The teachers didn't seem to use the counselor."

Along the same line in a school with six counselors one worker noted--"The counselors were pleasant and cooperative . . . but we didn't seem to get that type of feedback from the students. Usually we get at least a few that praise the counselor but I never had one student sing the praises of his counselor. Often the counselors . . . left the door open when students were in to see them."

In a one counselor school a worker observed this--"An unusual person. I saw him react to slow and bright students, so at ease with him. I would have liked to have him as a counselor for my children."

In another one counselor school the same worker wrote--"The students did not seem to have respect or praise (for the counselor). The principal did more effective counseling."

Another worker's notes include this impression--Mrs. _____ would be my choice of a woman counselor. She had maturity, experience and understanding and was not too rigid. The girls I interviewed all thought she was terrific . . . A parent called while we were in her office. Had I been the parent, I'd have felt I was most welcome to come and discuss my child's problems."

A field worker said she was shocked by one situation during a school visit. She wrote in her notes--"I did not like Mr. _____'s use of sarcasm to the student . . . He didn't impress me as being interested in kids. They in turn didn't rate (the counselor) too high."

In observing what students said about one counselor, a worker noted--"None interviewed seemed impressed with the counselor, all said he drifted off the subject so often (he) didn't help."

Just the opposite was observed with this notation in another worker's notebook--". . . I was impressed with the number of students who came on their own accord to seek out the counselor."

Field workers positive remarks here center around their perception of such characteristics as warmth, outreaching, understanding and enthusiasm about the job. They viewed as negative counseling with counselor's door open, use of sarcasm with students and report little praise for the counselor by students and teachers where there is no counselor respect.

Counselor Commitment

On counselor commitment to school and community the following remarks are enlightening.

One worker observed that this . . . (counselor is) a warm, kind personality . . . especially interested in the students success and community life."

Another worker noted about a counselor that--". . . he wanted to impress us with the reason he went into counseling. I felt he couldn't justify himself. He loved the community because it was so close to hunting and fishing."

Along a similar vein was this impression of a counselor who apparently could not budget his time well.--"Mr. _____ seemingly loved counseling and talking to people . . . he enjoyed the Faculty Lounge and its companionship."

This same worker observed of another counselor--"Mrs. _____ . . . did not live in the community. She didn't seem to wish to become too well acquainted."

One worker noted about a counselor--"Seemed interested only in top students, lower ones and average he knew little or nothing about, also showed up in student reaction."

About a dedicated and enthusiastic counselor in a small school one worker observed--"He . . . has by no means quit trying in spite of a not too cooperative school board. He needs clerical help-- things are piled up that he has no time to sort and file. We wouldn't expect to find this type of counselor in many schools. He was 'tops' in my book."

These remarks of field workers relate closely to the previous section on counseling in that it is quite apparent to others the nature and extent of commitment the counselor displays on his job and in the community. Commitment to others and superficial relationships are both easily observed but dramatically different when it comes to providing real assistance to students in high school guidance programs.

Counselor-Teacher Relations

Communication sometimes is a problem in a large school. A teacher reported this to a field worker--"We have a wonderful group of counselors but . . . it is hard to coordinate our work. We get so bogged down in red tape we can't accomplish the things we would like to accomplish . . . It is the unwieldiness of a big system."

One field worker recorded this counselor remark--"I was impressed with her remark that she did as much counseling with beginning teachers as she did with students."

Here is a negative impression made by a counselor upon teachers as observed by one worker--"(He) did not seem to be well accepted by teachers; lacked enthusiasm."

Another worker summed up teachers reaction to one counselor--"Teachers did not seem to be too impressed with him (the counselor). Their complaint was that there had never been a meeting telling them about his work. They appeared to be in the dark as to what he was doing."

Some teachers do not even see the need for communication and cooperation with counselors although it should be remembered that teacher satisfaction with counselors and the guidance program contributed to the outcome factor 0-1 (see p.99 and Table 36) General Satisfaction with Guidance. The following teacher remark reflects the lack of awareness as to the worth of teacher-counselor cooperation on behalf of students.

"Why should we be asked to evaluate counselors or the guidance program? We have no way of evaluating the results of their work. We are both engrossed in our own work. We assume that they do the job for which they were hired, same as they assume we do ours. In a school as big as this one, our paths seldom cross."

The field workers writing independently on their questionnaire agreed unanimously that communication between teachers and counselors was grossly lacking in many schools. The better communication seemed to occur in schools where there was a high percentage of younger teachers.

The workers felt that some procedures should be established whereby teachers could become more aware of what counselors actually do on the job.

Counselor Role

The field workers often were quite observant in discriminating between what a counselor was doing and what he should be doing. Here are a few selected such observations.

"I felt he wasn't utilizing his time for counseling. It was apparent that he is more of an assistant principal . . . The office called on him for several duties--he seems to have perpetual hall duty."

In regard to how the counselor spends her time another worker wrote this about a counselor--"The school has a great deal of guidance materials but (I) wondered if Miss _____ wasn't trying to do too much (with materials). She had no secretarial help so consequently had to spend time doing that thereby robbing students of time she could have spent with them counseling."

Another worker noted still another kind of imbalance with this observation--". . . he tried to force college down all their throats . . . my impression was a lack of guidance toward vocational or technical schools and careers."

In one large school students complained to the field worker--"They were forced into classes they did not want. 'He (the counselor) doesn't care--he just says take this--this is best for you and it wasn't what I wanted.' 'Why can't we have something to say about it'?"

"In a school this size (large) we did find students who did not know their counselor. The college bound knew him best. They are the students who generally see the counselor often enough to get the feeling they know him."

The many references to nonguidance functions imply that some counselors do not fully understand and/or accept the counseling function in a guidance program. Others spend a disproportionate amount of time with the college bound or college as a post high educational choice.

What a counselor does is probably a function of his own needs and personality. Some counselor needs may not be clearly known until after he has an opportunity to function in the actual role for a period of time. The needs and relative flexibility of counselors, however, might be more fully revealed during their preparation period through more varied and intensified supervised experiences. Counselors, also need assistance in implementing their role after they are assigned a counselor position in the school.

Unmet Counseling Needs

Instances were cited by students where additional counseling was needed either in the small no-counselor school or the large high school. Here are a few remarks by field workers on this subject.

"One of the teachers who had resigned said he did so because he failed to inspire his students. Most of the class was satisfied to get a mediocre job . . . there seems to be such a crying need for a strong counseling program in towns like this."

In another school the worker reported this--"This year the students had a senior high meeting to discuss school problems. One of their big topics for consideration was "Guidance and Counseling for our School."

The same feeling was reflected in still another small school--"The students were cooperative and commented 'We surely would like to have a full time counselor to whom we could go anytime for information and personal conferences'."

A general observation by one worker sums up a large part of the problem. She wrote this--"But many felt there should be more time and more counselors that students might have some one to whom they could talk--but they wanted to know him first. The personal problem seldom got the attention it needed and only because there was not enough time."

This field worker told of a senior girl who related an incident her junior year when she requested an appointment to see a counselor about a personal problem. She was told it would be two weeks. She left, took a bus to Minneapolis, spent the night in the depot and returned home in the morning to her upset parents. She went to a mental health clinic on her own. She told the worker a lot of this might not have happened had she had someone to talk to.

What is reflected here with these observations is a need for a counselor in the small school and more counselor time in the larger schools where they are already employed. Even with a student-counselor ratio of 350 or 400 to one there is not enough time for students and counselors to become better acquainted. As one student wrote to us about his impression. "Four 20 minute interviews in four years is hardly time enough to get to know anyone."

Selected Student Remarks

Numerous data were collected from former students and treated statistically as outcome variables in the study. The nature and value of these characteristics have been reported and discussed in great detail in the earlier chapters of this report.

The data reported in this section are the more informal kind which were written by graduates often on a separate sheet of stationery and attached to the "High School Graduate Questionnaire." These remarks represent the thoughts, impressions and feelings of students which they felt should be communicated to us in clarifying how the guidance program came across to them in fulfilling or failing to fulfill their needs while in high school. As one student put it--". . . your questionnaire seemed terribly vague. I feel I must add a little information." These remarks are but a sample of the many supplemental statements submitted by students.

Students Grateful

Many students made references as to how much they appreciated receiving help from teachers, counselors, principals and adults outside the school setting. Some received help from friends.

A high school graduate from a large suburban school serving as a soldier in Viet Nam wrote--"The counselor and guidance program we had in our schools helped me out a great deal. I found answers and solutions to so many problems I had. I also had a great deal of help from a close friend. I would like to give credit to the counseling and guidance program we had in _____ they did alot for me while I was going to school there . . ."

Some students, a minority in this case, did not sense a need for counseling or guidance while in high school as many of the critical decisions were made independent of counselors or with little assistance from them. These mature individuals were aware, however, that such services were available in the school. The following excerpt from a girl who also graduated from a large suburban high school reflects this point in her note to us--"I feel that my high school provides excellent counseling, although I took little advantage of it . . . I did not plan very much with my counselor because I knew what my major was and my choice of college. However if I would have had any questions or problems, my counselor would have answered them for me."

A special case is that of a small school graduate who wrote these comments regarding her observations--"I saw our high school counselor countless times because I worked in his office one hour a day. I really cannot estimate how often or how long visits concerning myself lasted.

"I think counselors are effective only to those who seek them out . . . Working in his office, as I did, I can honestly say I saw almost everyone at one time or another, visit our counselor.

"I don't know their problems and I don't know if he really helped them, but I do know that they came."

These students were aware help was available and many students took advantage of it. Many were also grateful for the assistance they received. The remaining excerpts in this section are more critical of the counselor and the guidance program. They nevertheless shed further light on perhaps why guidance is not more helpful.

More Help Needed with "Making Choices"

Most of the extended remarks falling within a single category were these which came under the category of need for help, more

help, earlier help or more directed help related to school and career decision making.

As one graduate put it--"Every student wants someone they can talk to. Each student feels very mixed up . . . he wants to be told what he is going to be best suited in as a vocation . . . so now he has an aim."

Another graduate wrote--"I feel that counseling in schools is very helpful in some ways but my high school counselor failed to help me really decide what I want to do or be in the future. I will be completing my first year at college . . . I still do not know exactly what I want as my major field."

Here are two comments from girl graduates from the same suburban high school--"_____ offers an excellent counseling system (at least the counselor with whom I associated throughout my high school years proved invaluable to me). Many other excellent opportunities were available (group guidance activities) of which I unfortunately did not take advantage. The system at _____ is very thorough but the student must seek it out on his own initiative which for me was an inadequacy on my own part."

The second girl made these observations--"Counselor can be of help but for most part they can only advise. It is up to the individual to decide, choose and pray that he has chosen wisely in behalf of his own interests. The only thing I regretted was that I asked so late for advise. I wish someone had called me in to see if I needed help."

A girl dropout added these personal impressions to her questionnaire--"I would like to say the counselors in _____ High are exceptionally beneficial to most students. They are both wonderful men and are genuinely interested in the welfare of the students. I was just one of the mixed up cases that no one could help or understand since I didn't know what I wanted except to be free of burdening my parents any longer. I'd give my right arm to go back to school but right now I am not even working. It took me too long to realize my counselor, Mr. _____, was right. Nothing out values education."

"I wish there was some way of pounding into high school people's mind to go to college. I am still kicking myself for not doing it." This strongly states the case for the individual who feels he is catching up to the world only to discover he is ill equipped to cope with life.

More time for counseling was stressed by some as exemplified by this comment--"I feel that _____ High School counseling could be improved . . . A more active interest in the student as an individual must be taken, since one 20 minute interview a year was all that many students received. How can a counselor help a student

when he has only spoken to the student personally about 80 minutes in four years. And our student body was not very large!"

A girl graduate from a smaller high school now attending college in California reported her feelings about the counselor in this way-- "The school I went to . . . had only one counselor. I feel this was inadequate. The counselor was not concerned with individuals enough. He thought whatever a student decided was best for the individual. He was good though with informing students about their aptitude and interest scores."

"I feel there should be more stress put upon that choosing each class is important towards preparing for college.

"I found through the years I liked math the most. I told my counselor I liked math the most. He saw my highest scores in aptitude and interest tests were math. But what did he do when I said I wanted to drop geometry because I was too chicken to take it? He thought whatever I decided was the best . . . I feel our counselor should have made me take geometry."

Another graduate expressed how she felt about lack of direction in this way--"I never felt at ease with my counselor . . . Several times when I went to see him large silences developed in the conversation. I waited for him to say something and I think he must have waited for me to say something. It made me feel ill at ease and awkward."

A thread which ran through some of the letters was a reference to counseling for more than just educational-vocational planning, career choice and problem solving. For example, one girl wrote "I also think when you are in your senior or junior year, you should sit down with your counselor and analyze everything about yourself. This would help you understand yourself and really show you where improvement is necessary. A lot . . . need someone to give them confidence in themselves."

Several points can be identified in these remarks by students. First, it is clear that student needs for assistance with identity, career choice and school purpose are not fully being met with present use of counselor skill and time. In some cases there is need for more counselors, in other situations counselors need to change their emphasis to meet these needs.

Related to this problem is a lack of understanding of the student's responsibility in the choice-making process. In some instances counselors apparently are not fully aware of the student's role and rely more upon advising as a technique in helping students with decision making. (see Field Workers Observations pp. 163). These students seem to be saying these decisions are too important to permit the student to decide whether or not they should be discussed with others.

Non-College Students Need Help, too.

Some felt counseling for college was overstressed for some students at the expense of others not planning on college.

The following two excerpts refer to this--"In our school the main ones (the ones going off to school) were helped three times as much as the ones who were looking for jobs. The ones who aren't going to school are mixed up more than anyone."

"I believe too much emphasis is put on going to college. The way some of the instructors in my high school made things sound if one didn't go to college there was no place for him in our society. I realize now this is not true. There are many vocational schools that offer good training. I believe high school counselors should let the individual chose between college, vocational schools, military service or working."

Another male graduate stated it this way--"Most students were automatically advised to attend college. While going to college is fine, many students simply are not interested in college or they lack the capability to be successful in college."

It is obvious to these students as well as others but apparently not to some of their counselors and teachers that there are other choices as respectable and contributing to self and others as going to college. This criticism has been leveled at high school counselors for some time.

Personal Problems

Counselors are not usually seen as the person one would go to for help with personal problems. The following remark is one of many which indicated lack of trust. Some students simply do not believe that counselors respect confidentiality.--"Our guidance program was fine for finding out about college, jobs, test scores, etc., but the people who were the actual counselors could not be trusted. I feel a high school student should be able to talk to a counselor without fear of someone else knowing. I have known of several instances where deep secrets were told. Also a student should be able to tell a counselor any kind of rules he has broken in the past without being told on."

Here a large-school male graduate points out he went to teachers for help--" . . . I received quite a bit of help from my teachers. When I had a personal problem I took it to one of several teachers that I did not have for a class and that I had gotten well acquainted with during my three years. I feel that the . . . staff with which I was in contact, helped me very much and were most understanding with any problems presented to them."

Another male graduate, from a smaller school, listed a number of suggestions, one of which was concerned with personal problems. He wrote--"Interviews of a personal nature were practically non-existent. Most students who had personal problems took them to a teacher with whom they were close. Very few went to the . . . counselor."

A girl graduate writing about personal problems said this--"I don't think I could ever approach my counselor with any personal problems . . . I could never picture myself taking my problems to a person on the faculty whom I'm not very familiar with. It seems like going to a stranger with something that is personally important to me. This I could never do."

The person a student goes to for help with personal problems according to this sample of student responses must be someone they can trust and really feel they know as individuals. These students did not see the counselor as a person fulfilling these expectations.

Dual Roles Difficult to Play

While we have noted elsewhere in this report that some principals have been more effective than the counselor with some students, others see this as a difficult role to play. The same is equally true of the teacher-counselor role.

A girl graduate from a small school wrote--"We should have had a counselor because our principal was not much of a counselor. He did not seem to be much concerned with the students."

Another girl graduate from a middle size school noted this about her part-time counselor--"We did have a part-time counselor, however, he did not put aside a special hour in which students could come to him and discuss their problems. Since I didn't want to disturb his classes and I couldn't stay after school, I did not receive the counseling I should have had and I don't believe the other students did either."

While the students see counseling as a function to be performed by the teacher-counselor or the principal-counselor, they do not see these people fulfilling this expectation.

Post-High Guidance for Some

We did not ask the graduate for information regarding post-high school guidance received but we did receive some comments in this area.

A female graduate from a small school stated--"_____ High has hired a full-time counselor this year. I have met him and received some assistance from him."

Another girl graduate from a small school wrote in the same vein-- "Since I have left high school the counselor has been of assistance to me with decisions about changing colleges, what program to take, etc."

There is an increasing need for post-high school guidance programs. Development and expansion of counseling services for students in area vocational schools and junior colleges as well as young workers going to the state employment service should satisfy some of this need. However, some students may still feel more comfortable returning to high school counselors or teachers for assistance.

Counselor Sex Important to Some

As discussed in Chapter 2, p. 31 the sex of the counselor was included as an input variable. Two responses are included here to illustrate the feelings some of the students have about the sex of the counselor.

A boy graduate stated--"I don't feel men should have women counselors. I can't feel free talking to her."

A girl graduate said--"I feel more students would benefit from counselors if boys had a man counselor and the girls a woman counselor. One then feels more like expressing opinions and ideas and they know their interests wouldn't be laughed about. I had a man counselor but would often turn to an outside woman for advice. I think I benefited more from her than my own assigned counselor."

Student feelings about whether or not the counselor must be the same sex as student are reported elsewhere in this study (see pp. 56). They were about evenly divided as to whether it made any difference to them. The ideas expressed here merely indicate some of the reasons behind the feelings.

Orientation to College Needs Broadening

One male high school graduate now at the University felt short-changed as reflected in these remarks--"The guidance I was exposed to could be improved by having the counselor be more specific about college curriculum. I walked into the "U" without such knowledge and got shocked pretty bad. Not only did I fail to perceive what the professors expected but I knew nothing about the campus atmosphere." This does point up a need for students to know more about college and understand what it is like both in and out of the classroom.

Some Remarks on the School in General

A few of the graduates made remarks concerning the school in general, such as one from a male student now attending a state college--"I definitely feel that our school is lacking in the field of student guidance. My school had many faults. To graduate from that school was to come off an assembly line . . . all identical. To show any traces of individualism was an unpardonable sin. A person couldn't be different in any way. It just wasn't tolerated. I am a different person. I had no choice."

There is a trend in our society today to stress the importance of individual freedom and accounts of conflicts between students and the school as a social system are common. There was a school in the study which actually gave a student a negative rating on his cumulative record if he were a nonconformist (the school has since dropped this in a revision of the cumulative record card).

Information About and Comments From Dropouts

In addition to the sample of 1965 and 1966 graduates, a third sample was identified consisting of six dropouts from each of the 84 schools. They were sent a questionnaire (see Appendix B) which contained similar items to the questionnaires sent other students, but because of their unique status, several additional questions were asked in order to gain a better understanding as to who offered help, how they perceived the help received, reasons for leaving school and suggestions they might have for potential dropouts.

The returns were disappointingly low (36%) and even long distance phone calls and personal contacts by a field worker yielded very few additional returns. The dropouts and their families contacted personally were often very reluctant to provide information for the study. Those who did respond probably represent a biased sample; responses from the non-respondents might be very different from what is reported here. Nevertheless, the responses are reported on the assumption that they may provide some valuable insights about some dropouts.

There were 155 dropouts whose responses were usable. (88 boys and 67 girls). Tables 52 to 55 provide information from four of the questions on the Former Student Questionnaire.

As shown in Table 52 students generally gave nine different reasons for dropping out of school. The most common reason given by boys was "Adjustment Problems" which included difficulty with school

rules, trouble with teachers, the principal or other students. Following close behind was "School too Hard." This included failing subjects, skipping classes and falling behind in studies.

By far the reason most common with girls was "Pregnancy and/or Marriage" (37%). The next most common reason for girls was the same as for boys "School too Hard."

Table 52

Reasons Dropouts Gave for Leaving School			
	Percent		
	Boys N=88	Girls N=67	Total N=155
1. Adjustment problems (difficulty with school rules, teachers, principals or other students)	30	11	22
2. School too hard (failing, skipping classes, behind in studies, etc.)	26	23	25
3. Pregnancy and/or marriage	5	37	19
4. Family and financial problems	10	19	12
5. Joined Military service	9	--	5
6. Get a job	6	--	3
7. Sent to correctional school	2	--	1
8. Illness	2	2	3
9. Personal problems	1	5	3
10. No reason given	9	3	7
Totals	100	100	100

Table 53 identifies those individuals who dropouts said offered help when they were about to drop out. The category which received the highest mention by both boys and girls, was "no one." Of those offering help "Counselors" received the most credit. This was also true of both sexes. Principals was the second highest group named as offering help although girls mentioned teachers equally as often. For boys, "Friends and relatives" were third but these were listed only fourth by the girl dropouts.

Some students did receive help although often this was too little and too late. Many of them received no help from school staff.

Table 53

Who Tried to Help You Stay in School

Source of Help	Percent		
	Boys N=88	Girls N=67	Total N=155
Principal(s)	13	21	16
Superintendent	2	3	3
Counselor	24	25	25
Teacher(s)	13	10	12
Social Worker	1	1	1
Nurse	--	1	*
Parent(s)	2	6	4
Friends, Relatives	9	16	12
No one	43	39	41
Totals	107**	122**	114**

*Less than 1%

**Some named more than one who tried to help

The kinds of help the dropouts reported receiving were categorized and counted and the results are shown in Table 54. Again as with Table 53 the highest single category was "no help mentioned."

The type of help offered in most cases was "Encouraged me to stay by pointing out difficulties of dropping out," including pointing up loss of earnings and lack of self fulfillment. The rest of the kinds of help were distributed somewhat evenly among "Tried to talk me into staying"; "Helped to adjust class schedule or enroll in a correspondence course"; "Helped with personal and/or family problems"; and "Tried to find me a job."

Table 54

Kind of Help Offered or Given to Dropouts

Type of Help or Advice	Percent		
	Girls N=67	Boys N=88	Total N=155
Encouraged to stay--pointed out difficulties of dropping out, loss of earnings, lack of fulfillment, etc.	27	23	25
Go to vocational or trade school	4	--	2
Go to military services	--	1	*
Tried to talk me into staying	8	2	5
Tried to find me a job	4	1	3
Helped to get other class schedule or correspondence course	6	2	4
Helped with another school placement	3	--	1
Helped with personal and/or family problem	3	4	3
No help mentioned	45	67	57
Totals	100	100	100

*Less than 1%

Dropouts were asked what suggestions they might make to help other students. Their suggestions are listed in Table 55. Some suggestions were made to potential dropouts directly while others were to the school.

The suggestion mentioned the most had to do with encouraging the would be dropout to stay in school and stick it out no matter what the odds. The suggestion next most frequent with boys was "More understanding teachers" (a few included principals). "More individual help" and "Special help to slower students were included in the remarks about the need for more understanding staff. This category was the third most mentioned suggestion of girls while their second most common advice was "More effective counseling" which included help with personal problems, career planning and guidance courses. The notion of guidance courses included references to group discussion about family life and sex education.

The third most frequent advice of male dropouts was "More effective counseling" and covered the same areas as mentioned above.

Ten girls and seventeen boys offered no suggestions.

Table 55

Suggestions by Dropouts for the School and other Students			
	Percent		
	Boys N=88	Girls N=67	Total N=155
Persist with studies, stay in school, stay out of trouble, etc.	35	30	33
More understanding teachers, principals, more individual help, special help to slower students	28	22	26
More effective counseling, help with personal problems, career planning, and guidance courses (including family and sex education	15	30	21
Join extra-curricular activities, get to know more kids	1	3	2
Make course of study more flexible, offer how-to-study courses	--	3	1
Teachers keep parents informed	1	1	1
Provide vocational courses	2	--	1
Work hard in lower grades, delay entrance into school	2	--	1
Let them work out own problems	2	3	3
Consider military service	1	--	*
Let a friend offer advice	1	--	*
Change schools	--	1	*
Require education to 18 years	1	1	*
No suggestion given	17	10	14
Total	106*	104*	103*

*Some offered more than one suggestion

The dropouts as a group are quite similar to other youth in that they too are striving to gain a place in the sun. The following written remarks by dropouts have been selected to further the reader's appreciation of their dilemmas and human concerns.

Reasons for Leaving--Girls

A suburban girl wrote--"My parents, before they separated were constantly fighting in front of us kids and our friends. The home environment was unstable and so was the financial standing. Also we were constantly moving."

Another suburban girl wrote--"I missed quite a bit of school and got far behind. And unfortunately I was not smart enough to realize how important school is, so I didn't even try to get good grades."

An urban girl who dropped out her senior year wrote these remarks--"Father died--not enough money for graduation. No help from guidance!"

Another senior girl dropped out for a variety of reasons. She wrote--"I wasn't doing well in my studies and had family problems. I really didn't want to drop out but my counselor was of no help and didn't care whether I stayed in or not. I didn't like the teachers and most kids in school were hard to get along with."

"I didn't really leave. I left home, and never went back to school." These remarks came from a large-city girl who left school her junior year.

A girl now working in a factory who dropped out her senior year wrote--"Family problems, financial problems, a general desire to get away. Ran away from home."

A doctor's receptionist who left during her senior year explained, "A deep dislike for the school combined with acute personal problems, led to my leaving school."

A girl who has found no work except babysitting left during her sophomore year. She said, "I was out a lot with sickness and had a lot of make up to do. I was also one year behind because of sickness in the eighth grade. No one at the school (principal, teachers or counselor) really cared whether I finished school or not."

A girl now unemployed who left during her junior year gave these reasons--"I disliked the conformity. I want an education but I can't be like everyone else. I felt I must preserve my individuality--quitting school wasn't the answer."

A girl from a small school described her situation this way--"I did not like being with large groups. I didn't like speaking in

front of groups. School made me very nervous. I was in the hospital for this also."

Another girl from a small town wrote--"I wasn't staying at home and I knew I couldn't make it by myself since I was in my senior year the most expensive year of all."

A shipping clerk stated that she left school in the 12th grade.--"I left school to get married. I didn't really want to but my parents kicked me out and I had no place to go. At the time it seemed the perfect solution."

In a similar vein was this from another girl who left during the senior year--"I was under a great deal of pressure at home and since my husband and I were planning to be married soon I finally quit and got married a little before we planned."

A young divorced mother who plans to remarry stated that she left her junior year.--"My dad fell and broke his hands that fall. I thought I could help out so I got a waitress job, full time. After I got the job, I couldn't go to school and work both, so I quit."

A dropout now babysitting and doing housework said--"I developed an emotional problem. I couldn't talk to people. I thought everyone was talking about me and laughing at me. School became a headache . . . I couldn't study or eat. I hated the school because the well-to-do kids wouldn't talk to you if you weren't in their crowd."

An unemployed girl who left school during her junior year revealed disgust with these words--"I left school because in school I felt like a little baby the way the teachers treated everyone. They'd say 'Now you've been a naughty girl. Write 300 times . . .' For God's sake we're almost grown up and we come to school to learn, not to be punished."

A suburban girl now working as a beautician wrote--"I left school after 11th grade because I was pregnant. I'm now attending night school and hope to go back to school and graduate."

"I had difficulty with reading and consequently couldn't keep with my grade" writes a girl who dropped out of high school in her 10th grade.

An unemployed small-town girl answered our question this way--"I missed school quite a bit and because of this I got in an argument with the principal and I just decided to quit."

A rather sad case is this one of a girl who left school in her senior year. She wrote--"I missed school because of a condition--when I returned this one teacher haunted me for my make up work. When I approached her for help she would try to make me understand too much too fast. She frightened me. I had her class before lunch--she would stand over me in class, embarrass me, and make me so nervous I didn't know what I was doing. By the time the 55 minutes were over I was so upset I couldn't retain my lunch. I was spending all of my time trying to get her work done that soon I was falling behind in the rest of my classes. Then I decided to quit . . . (Note: she wrote further that going to the principal and the counselor was to no avail).

A filing clerk who dropped out her junior year from an urban high school explained her dropping out in this way--"Because I was fed up with stupid people telling me what to do. I know as you get older you always run into such matters but the teachers were very unfair to me and a lot of my friends . . . I talked to my parents about quitting and they thought it was the best thing for me."

Reasons for Leaving--Boys

Boys reasons for leaving in some ways are quite different than girls. This can be seen by noting Table 52. A few selected remarks below highlight this aspect of the study.

A boy now employed as a musician dropped during the junior year. He wrote--"After the 7th grade school became very dull and I lost all interest. My grades went down hill ever since. I wasn't getting out of school what I should. To be frank I'm no genius or anything but it wasn't much of a challenge so I lost all interest."

A boy now in service but a dropout from the 12th grade said--"I had a good job offer . . . so I took it. I am now in the Army and will be discharged in ten months. My job (meat cutter) will be waiting for me when I get home."

Many of the boys' reasons were quite short and reflect adjustment type of problems. Here are some of them--"Expelled for fighting," "I could not take the discipline," "I was kicked out. I didn't quit," "I was dropped from school because of trouble with teachers and the assistant principal," "Because I was always getting into trouble and I figured I better leave before they kicked me out," "Got kicked out," "Troubles with the principal," "I just didn't give a damn."

One boy now unemployed and thinking about going back to school wrote--"It's not all my fault. Some kids I hated beat me up every day just cause they thought they were tops. I told the principal but he didn't believe me. So I just took as much as I could and I quit."

A Neighborhood Youth Corps worker who dropped out said,--"I was just having too much trouble with most of my teachers."

One dropout was a little puzzled by the vice principal's changing attitude. He wrote--"I had a very hard time getting along with the vice principal. He kept telling me I wouldn't stay in school and blamed me for things I didn't do. Then when I quit he kept calling me back to his office to show me films on dropouts. I didn't know what to do so I joined the Navy."

Some students had difficulty with making passing grades. Here are a few, two of whom dropped out in the 11th grade and the third in the 9th grade: "Reading was hard for me. Couldn't get extra help from school." "School was hard for me and I got behind in my grades." "Low grades. Too many credits behind. Not able to make up credits."

Another boy simply wrote--"I just couldn't hack it."

Some expressed a desire to be out on their own, to be more independent.--"I thought that work was more important. I wanted money of my own. I was sick of asking my folks for money. I wanted to make it myself." "I felt that I had to go out on my own and get a job and do something instead of going to school. I wanted to be on my own and work for my own money and buy what I want and do what I want."

Some boys had personal and/or family problems. These boys dropped out of school in grades 10, 11, and 12. One now a farmhand said--"I was working nights. Teachers disapproved of me being married and going to school."

Another, a laborer said--"I didn't have enough money. I never got to go out much."

A Marine reported the following about his dropout experience--"I didn't get along with my parents. My father was going to put me in an institution so I went into the service."

Another serviceman stated--"A girl and I thought I would get by on the outside but found out different."

A boy now in road construction work wrote these lines--"I got married and in my 11th year in school I had a lot of trouble with my teachers."

An unemployed dropout reported this reason--"I wanted to help my mother and my little sister along. I had a job for eight months but I got layed off . . ."

A factory worker stated his father was killed in a car accident. He wrote--" . . . no income at home, had to leave school to go to work so things could be made to meet at home."

An 11th grade dropout now in the Marines wrote these lines--"I really left school in anger of my parents. Now I feel I made the biggest mistake of my life."

Students leave school for a variety of reasons. Some have adjustment problems, some have serious learning problems, some want or feel a real need to work while others have personal or family problems.

Kinds of Help Offered or Given

Table 54 shows the kind of help which was offered to students about the time they dropped out of school. Here are some selected remarks from the Former Student Questionnaire.

A boy now doing masonry work reported this in answer to the question about the kind of help offered--"My trade teacher and my counselor told me I was ruining something good in my . . . shop abilities."

A serviceman who dropped out in 11th grade said the assistant principal offered help after he left. "He helped me decide what service to go in although I already knew."

An Air Force serviceman in referring to his dropout experience stated--"My shop teacher told me how my chances would be in different career fields."

An unemployed dropout who left to get married wrote this--"He (school social worker) talked to me. He really cared about my problem. You know what the vice principal said? 'Get the hell out, we don't want you here'."

A male dropout now doing forestry work reported that his English teacher helped--"He tried to talk me into staying in school and is trying to get me back this year."

A Job Corps Center youth stated--"They (art teacher and counselor) showed me the good and bad points and let me decide for myself."

An unemployed dropout reported this about help offered at the time he was thinking about leaving school.--"The English teacher told me to stay because if I left, in a few years I wouldn't be able to get a job because you would have to have a high school education."

Many suggestions or advice given to potential dropouts were similar to this reported by a boy now in service--"He (counselor) explained what it was like and some of the problems I'd have to contend with."

A Marine who left school in the 10th grade stated--"The counselor helped me through the troubled times I had with my parents."

Another boy who left is now working as a farm handyman. He wrote--"The guidance counselor arranged it so I had three classes a day and still be able to work nights."

An English teacher attempted to help the following male dropout--"She gave me many, many chances to prove myself but I'm afraid I let her down. I thought she was an exceptional teacher, very nice and very good."

Girls generally wrote more comments than boys. Here are some which are quite critical of the school.

A married girl reported no one offered help. "They didn't give me any. My folks said if you don't want to go to school nobody can keep you there."

Another girl reported the principal did not help--"He didn't do anything. Called me and asked if I was quitting and I said yes and he never said anything."

An unemployed girl who dropped out in her senior year reported no help offered. She stated--"I was more determined or shall I say glad to leave when the assistant principal swore at me. I wouldn't have minded if I was the type of person with a cocky attitude or snotty personality . . . "

A filing clerk who dropped her junior year wrote these comments about the assistant principal not helping--"None at all he just discouraged me. They all made me sick. They didn't understand me in the least little bit."

Another girl was critical of the counselor and his lack of sincerity. She wrote of the help offered and its value--"Very little, I felt as if he would consider it a personal favor if I was to stay. This would not have been beneficial to me, only a boost for his ego."

A girl who left because of pregnancy said the counselor, principal and teachers all tried to help. "They helped me understand I was making a mistake but I was too bullheaded to do anything about it."

A girl who reported that the principal, librarian and English teacher all offered help. She wrote--"I was too headstrong to listen to them."

Another girl said the counselor, teachers and friends offered help. She remarked--"They tried to give me an idea of what was ahead for me and difficulties I might have. I wouldn't listen." She added--"My counselor did a lot to try to help me out . . . I haven't had trouble finding work so education isn't so necessary."

A girl now doing housework and babysitting left school during the 11th year. She wrote that the counselor, doctors, priest, relatives, parents, and tutor all offered help. "They tried to make me see that my life would be nothing now days unless I had a high school diploma . . ."

Another girl also babysitting reported this about the help offered her--"The counselor did something which I appreciated very much. He talked with me about quitting, but didn't sit and tell me how stupid I was to quit. He simply pointed out what some of the things were that I would have to face."

A girl now working as a cashier stated that her parents, friends and counselor offered help--"My counselor talked with me for quite awhile and showed a genuine concern with my future plans once she knew I had made up my mind."

An unemployed girl who left during the 11th grade indicated her father and the counselor tried to help. The basis of their arguments were these--"My father on a purely mercenary basis-- inability to get a job without a high school education. Counselor-- I'm a girl too intelligent to quit school."

A girl, now a shipping clerk, said of the superintendent who offered to help her when she decided to withdraw from school--"He tried to make me realize I was or could be college material and that I was wasting my talents by dropping out."

The next group of comments from girl dropouts refer to specific types of help or suggestions offered by others.

A small-town girl working as a babysitter wrote this about the principal's help--"Advised me to take correspondence courses and finish my junior year so I could go back to school the following year to finish my senior year."

Another girl dropout who attended a large urban school and is now babysitting wrote that teachers, counselors, and friends helped-- ". . . help about getting a job and help about going to school for girls."

A girl who left to get married is now in the Job Corps. She wrote that her school nurse--". . . urged me to take nurse's training."

"They suggested trade and vocational schools" wrote a girl drop-out about the counselor and advisors who offered help.

"The counselor tried to find me a job," wrote a girl who left during the 11th grade and is now working in a mail room.

An unemployed girl reported this about her counselor--"Helped me to go back to school, referred me to Youth Opportunity Center, helped me with classes."

A girl who left school because of pregnancy in the 9th grade is now unemployed. She wrote this about her counselor--"He gave me information on schooling I could take up after I left the regular school."

A principal and a counselor offered this help to a student who had to leave school to get married--"They made arrangements so that I could finish out my junior year and have tried to make arrangements so I can finish my senior year of high school."

A social worker helped this girl who left school to get married. "He talked to my parents and tried to make things easier at home."

Judging by these comments, students were offered a variety of kinds of assistance including encouragement, vocational information, job information, military information, alternate course arrangements, and counseling with personal and family problems.

Suggestions by Dropouts for the School and Other Students

The last question asked the dropouts was a request for suggestions they might wish to make to help other students. The results are tallied in Table 55 but here are some selected suggestions which the dropouts offered.

A boy wrote, "In our school it seemed that the smarter kids got more help or understanding from the teachers."

Another boy stated it this way--"If they help those that need it instead of those who don't . . ."

"Teachers should try and understand their students better by knowing what kind of person they are. The teachers can (should) help them at the level they can learn," said another. He added--"Also the school should help students more in deciding careers."

"More understanding teachers, better counseling. Teachers should give more individual attention to some students that really need help." These views were expressed by a male dropout.

"The teachers should help everyone--not just the ones that ask for help! (Some students are too shy to ask for help)"--These comments came from a girl who said help was offered but it didn't solve her problem.

Another student made these suggestions--"Each student should be made to feel like an individual with his own personal needs, desires and ambitions. It is the faculty's job to nurture this and make students want to do their very best. In my opinion, a teacher who has favorites or 'pets' among his students really kills interest or any spark of ambition for learning for the lesser students. They're too busy being resentful and jealous of the pets to learn anything."

In a similar vein are these remarks--"Teach the student teachers how to get along with the students. This could best be done by explaining to the future teachers that they shouldn't try to embarrass a student in front of the class and to treat the student with respect and realize he's not a kid."

The plea for more individual help continues with another former student's remark--"If the teachers would take more time with those that are hard to learn or hard to understand . . ."

"I believe that if the teacher would be of more the friendly type and not the hard unwilling to help and trying to be able to teach through a long homework assignment then I and many others would get a lot more out of school." These comments came from a male who left in his senior year.

A girl suggested more feedback from students with this idea--"They should try to find out how the students that are in school feel about it and the teachers. Some of my teachers used to tell the kids to quit and get out of school. These teachers shouldn't show such strong (feelings) against any student."

Similar are these words from another girl dropout. ". . . they shouldn't ridicule their teachers--instead take their 'beefs' to the principal or counselor and explain to them why they don't like this or that teacher. No student can work to his fullest capacity in the presence of a teacher he feels is not doing his job right."

Another former student said,--"More help with personal problems. Special help to slower students." Another male wrote in the same vein--"More time to do your work in class, teachers should go into more detail in class for some of the more slower students . . . teachers should call parents to find out if the parents know how their children are doing in school."

There were many similar suggestions--"Teachers should make a better effort to help the student"; more individual help if possible"; "a student who is hard learning should not start the first grade until he is 8 years old. His daily assignments should not be more than he can learn." He added further--"a little understanding and someone who cares."

A boy wondered if perhaps "more understanding of the bad guy by teachers" might help. He went on--"They all dislike a fellow or girl that has been in some kind of trouble."

Vocational courses were mentioned by some. "I think the school should have an on-the-job training program and some understanding teaching," and "Get the classes more interesting and more on the line of trade school level."

A girl stressed the value of group guidance. "I think the guidance course was a very good idea. I think it should have been in more schools. I also think they should require it in more grades than one. Because the students need guidance all through their years of school. It helps them express their opinions and suggest some ideas."

Related to this suggestion is one about family life and sex education--"I think a high school student should learn more about the facts of life and hardships and troubles of being married and working through college."

Some made suggestions regarding counselors and their function. "I think that if the principals and counselors would sit down and talk to students the way they would like to be talked to when they had gotten into trouble there would be much less trouble in school. I had a counselor that could really make you feel at ease. That kind of person can get through to almost anybody."

Another male dropout suggested this in his criticism of counselors--"I feel that the counselors should find time to call everyone of the students in the school down to see them because sometimes a person can have things on their mind and are afraid to say it first . . . a lot of counselors don't really have that much to do anyway except sit in the lounge and have a cup of coffee and have a cigarette."

A girl dropout expressed her feelings this way--"Most of the counselors I went to told me what was best for me instead of asking what I would have liked to do. Even if what I liked wasn't the best for me they could have listened to why I liked it."

Stressing the worth of the individual was this girl--"More personalized care and guidance. Not just another number without a face, but a human being, each with problems peculiar onto themselves."

The difficulty of the teacher-counselor role was referred to in these remarks--"In my school the counselors were also teachers and because of this many students were unable to see them for the help they needed."

A girl who experienced difficulty with her counselor wrote these comments--"Try to keep them in school, don't be like the counselor here who told me he didn't see why I need a high school diploma and I might as well quit. Take more time to help and understand the students."

"The only ones the counselors help are the rich and popular kids. They might say two words to the other kids but the popular kids are in there for hours and hours." These words came from a girl who reported no help at the time she dropped out.

More student-counselor contact was suggested by still another student. He wrote--"I feel the student should at least see their counselor while there in school and have the counselor find out something about each student to help the counselor understand them."

In a similar vein is this comment by a girl--"Have counselors talk to students at least two times a year to see how they are getting along with class, teachers, etc."

"Urge the kids to go to counselors more often. Also more counselors should be put in larger schools," remarked another girl.

The value of counseling for the individual was stressed by this girl who felt she received help with personal problems--"My counselor was the most helpful man in my life. He helped me more with my problems than anyone will ever know. My only suggestion would be to have more counselors in each school to give the individual the help he or she needs. To have the same counselor who could get to know you, your personal needs, desires, hopes, and personal problems so he can better understand you as mine did when you go to him for help. I believe this is most important."

Other bits of advice included the following--"I think if _____ school had a counselor, the students would have more interest in school and its problems;"--"Tell them to go to the counselor whenever they feel they have a problem"; "Have a guidance counselor" and "Don't assign the student to counselor, let him choose."

Some remarks were directed to the students now in school. The most typical of these was--"Stay in school and get all the schooling possible. You sure need your 'High School diploma to get a good job." Another was--"Don't quit. You won't get jobs. People treat you like scum if you quit school."

A youth encouraged other students to "keep busy with school work, do extra things in your own interests that pertain to your studies. I think understand(ing) the teachers is also very important. Give them a break and they'll return it."

Another former student said, "Be active in sports, plays, etc., and concentrate on your school work and tell yourself how it will help you in your later life."

One boy who used a metaphor to better communicate his ideas: "Don't be a double dropout or just another name, pick up a glove and stay in the game! You know we have some pretty fair umpires calling the shots in this old ballgame of learning. Don't strike out! Grab the bat and hit a home run. At the end of your bush league learning days, you will have graduated to the big league jobs and everybody knows there's better pay and bigger rewards when you're an old 'pro' who has had the stuff to stick it out until the last of the ninth on graduation day."

A girl pointed out--"If you need help don't keep it inside you, talk it over with a teacher, principal or your counselor or anyone that really can help and understand you."

The importance of career guidance was stressed by one student--"Really study hard and try to know what you want for a career before you leave school. I think counseling is important in everything you do in school. You should have other people's opinion to help you decide if you are unsure of yourself."

Dropouts, boys and girls alike, stressed that teachers should help all students. They also emphasized more individual help in school work and that teachers and students should know each other better.

Some felt there should be more group guidance activities and more vocational courses offered. They felt counselors could be more effective by working with all students, not just the popular or well-to-do students. More counselors and more counseling were also suggested.

To other students now in school they emphasized that students get to know teachers better. They also stressed keeping an active interest in extra-curricular activities.

Chapter 6

CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Throughout the first five chapters of this report, a serious attempt was made to present, in an objective and unbiased fashion, the details of an exploratory study of a rather complex set of relationships. Many details were omitted because it was judged that they did not contribute materially to the findings. Even so, it was difficult to report the multitudinous relationships in a very succinct fashion, and the unavoidable repetitions may at times have made tedious reading. The reader may be relieved, then, to know that the previous findings and summaries will not be recapitulated in this chapter. Rather, the writer will attempt to state in nontechnical language the conclusions he draws from and the implications he sees in the data. These conclusions and implications may derive from statistically significant relationships, from many small trends, or even from observations made in the course of the study. They deal with both methodology and findings.

In "total impact" studies such as the present one, the risk of omitting some measure which might have been important is more serious than the risk of including some relatively useless or overlapping measures. This being so, the factor-analytic technique used to derive internally consistent scales is useful in this type of study. It pulls together the indices that really measure the same thing and reduces the number of measures that must be kept in mind, thus making it easier to see what is really "going on." In pulling together the measures that are alike it also reveals commonalities that might otherwise have been overlooked. For example, the "large size" factor included a number of measures, one of which was teacher-pupil ratio; without the analysis, the consistency of high teacher-pupil ratios in large schools might not have been apparent.

The use of multiple regression analysis along with factoring is also valuable, because it draws attention to the combination of factors that together help the most in predicting desired goals. As an example, Table 40 indicates that holding power is best predicted from the kind of person the counselor is, as perceived by students and observers, but that the value of this is largely dependent on his being in a small school. Looking then at small schools only (Table 44) we find that the value of the counselor's personal effectiveness is most enhanced if he spends his time with the larger student body rather than with problem cases. Thus the regression

analysis provided clues to the improvement of guidance practices which correlational analysis alone would not have clearly revealed.

In addition to the methodological values of factoring and regression analysis,¹ a study of the factors themselves leads to further recommendations.

Environmental Factors and Guidance

Guidance programs operate within complex social contexts. These contexts exert many different kinds of pressures and influences on the lives of students, pressures about which it is often assumed that little or nothing can be done by guidance workers. In the present study, many of these environmental influences were measured, and through factor-analysis were pulled together into six scale scores. These influences were indeed found to affect the students, often much more than did the efforts of guidance workers. The question is, are these situational factors which affect the lives of students actually totally impervious to influence by the counselor? The assertion that they are may hide the implicit assumption that it is none of the counselor's business to try to influence them; that the counselor's job is limited to coming to the assistance of the student after the environment has clobbered him. It is time to ask whether we can afford the luxury of such modest assumptions about the counselor's role. It is time to ask whether this role should not be redefined to include efforts to help in bringing about changes in the milieu in which the student is struggling to grow up in an effective way. Consider the following environmental factors.

1. An academic atmosphere in which there is a strong press for achievement, for humanistic excellence and esthetic appreciation was found to be predictive of better holding power, a larger number of students continuing their education, and better self-concepts, trends that were especially noticeable in schools where the average measured scholastic ability was relatively low. There was also less underachievement in schools with strong academic press, and this was especially true in high-ability schools.² If we agree that completing

¹Cross-validation of the factors found here would be desirable, should the same variables be used in another study. However, it is not realistic to expect factor-scores (to say nothing of scale scores derived by factoring) to remain unchanged when applied to different populations. Even though the factors would probably differ somewhat in another study, the methodological value for reducing redundancy and seeing relationships remains.

²These findings support and cross-validate McDill's study in which he reports finding that the prevalent academic atmosphere of a high school affects achievement, college plans, and intellectual orientation of the students (4:XIII, pp. 7-8).

high school, continuing one's education, achieving up to capacity, having positive self feelings are desirable behaviors, then it is time that counselors begin to assess the academic climate of their schools and to seek ways of influencing that climate.

2. Until recently, low academic ability had been thought to be particularly impervious to any change, but more and more evidence from various sources demonstrates that very marked changes can be brought about, especially during the early years.¹ In the present study, low ability was found to be a part of a syndrome including family educational and economic disadvantage, often lack of good community facilities, schools with less well trained teachers and fewer facilities for students, and either minimal, new, inadequate guidance programs or programs centering on problem students at the expense of the others. In addition, the students in these schools were more vocationally immature and underachieving.

In such schools as these, it is time for counselors to reconsider the long-run value of spending most of their time and effort in dealing with the most troublesome cases, as compared with time spent in seeking ways to help improve the general level of achievement and vocational maturity. Perhaps secondary counselors should even consider seeking ways to influence and cooperate in efforts to provide better pre-school and early school experiences in feeder areas, so that the next generation of students will need less remedial assistance from the counselor.²

It would be totally unrealistic to expect such role changes from the counselor unless the administration recognizes the need for this new counselor role, strongly supports it, and provides enough staff to carry it out while still maintaining essential ameliorative functions. But the counselor must also be able to change; unfortunately the emphasis on testing in the training and work of some counselors tends to foster the myth of the immutability of test scores and thus, of the traits measured by tests, making such counselors resistant to change rather than facilitators of change in currently inadequate and rigid concepts of learning ability.

3. Nearness to post-high school training was found to be of considerable importance in predicting outcomes such as good holding

¹An excellent review of the changing conceptions of the nature of intelligence is provided by J. McVicker Hunt (3).

²Fortunately the recent national attempts to alleviate some of the stultifying effects of deprivation (most particularly the Head-start program) are providing funds and impetus for this effort, but counselors should at the very least be aware of and strong supporters of such programs as well as elementary guidance (2).

power and a high incidence of continued education. While an individual counselor may be able to do little to promote the development of post-high school educational opportunities in his area, area or state counselor organizations may find it possible to exert some influence in that direction.¹ The individual counselor may also be able to help students overcome the handicap of distance if he is aware of its influence.

4. It would seem that there is nothing the counselor can do about the size of the school and the community (subsumed under the "large size" factor in this study) which appeared to have considerable influence on student behavior. An examination of the size factor shows, however, that large size is accompanied by other advantages and that it is these advantages rather than size per se that are really influential. Among the advantages that go along with size, the most important appear to be nearness to post-high school training and such school factors as the number of school facilities, number of days in the school year, number of special classes, number of subjects, and number of teachers with advanced degrees.

On the other hand, in schools with the largest classes there were more students with unrealistically high vocational aspirations, and larger proportions of the very lowest ability students trying to get into colleges. It was also found that in the large schools the students participated in fewer extra-curricular activities and teacher-pupil ratios were clearly higher.

It thus appears that in small schools where consolidation is not imminent the counselor can at least look at the advantages that normally accrue to large schools and consider how he might help to provide some of these advantages while at the same time making the most of the advantages of the small school.

In summary, it is recommended that counselors should consider the value of spending less time and effort with individual students in attempting to ameliorate problems brought about by negative influences in the school environment and correspondingly more effort in doing what he can to help bring about changes which will facilitate healthy growth. It is recognized that many needed changes can only be brought about by action of the superintendent, school board, or other school authorities. Counselors can, however, use their knowledge of the problems and their research and human relations skills to set the stage, provide the knowledge, and to serve as catalysts for the desired changes.

¹In Minnesota, the very recent increase in the number of area vocational schools and community colleges has done much to make training available to all.

Guidance Factors

An examination of the factor-analyzed guidance program dimensions and their influence leads to some recommendations and implications.

1. There is an array of guidance activities other than counseling that may be carried on by counselors, including such things as group guidance, working with parents, testing and using test results, compiling and using occupational information, carrying on placement and follow-up activities and the like. It was hoped that the schools in the sample would differ enough among themselves to provide some information on the relative value of these various activities, but as it turned out, the dominant tendency was for schools which did little in one area to do little in the others, so that in measuring relationships these activities all functioned alike as one cluster or unit.¹ There were schools within the sample which emphasized some particular activity but not enough of them to bring out any differences in effects which might be present.

More important, differences among schools in the overall level of these guidance activities did not seem to make such difference except in terms of satisfaction with the guidance program. One exception was the one-counselor schools, in which a higher level of overall guidance activity was related to both holding power and self-concept.

These findings illustrate both the value and the weakness of a "total impact" study of a representative sample of schools. The study does indicate that "across the board" schools differ less in the amount of these guidance activities they carry on than might have been expected, and that the activities generally seem to have little impact. At the same time, the study fails to focus on each of the activities separately and bring to light any possible differential effects. Since the study does indicate some value in these guidance activities, what is needed now is a study of each activity separately. In order to carry out such a study, schools which emphasize a given activity must be identified, and these schools compared with others in which that activity is touched upon little if at all.²

2. It is noteworthy that in the process of factoring the measures relating to guidance programs, three of the eight factors extracted relate to what might be called three "counselor styles." While the

¹The regression equations using the original measures instead of the factored scales did indicate that parent contact, testing, and placement activity functioned best of the guidance activities in predicting outcomes.

²A comprehensive national study using a sample of thousands of schools would also provide information on this point.

three measures of "style" are fairly distinct and independent, indicating a stable tendency for counselors to behave in one or another of these ways rather than mixtures of all, the three are by no means mutually exclusive. One behavior mode is that of running all students through the counselor's office at regular intervals and seeing them briefly and superficially, but spending very little time in counseling of any depth. Another is working in greater depth with the students who have the more serious or obvious problems, but having little contact with the rest of the student body. The third is spending relatively large amounts of time in activities that are labelled by the counselor himself as nonguidance functions, at the expense of time spent in counseling.

A study of the relationships of these behavior modes to outcomes leads to the conclusion that the "superficial mode" may be rejected out of hand as not being of much value to anyone. The other two modes raise some interesting questions.

(A) Counselors who spend most of their student contact time in "problem-counseling" (counseling students who violate school rules and/or students referred by the staff) tend to be counselors in low-ability schools in disadvantaged neighborhoods.¹ In such schools, where many youngsters are likely to be having relatively serious difficulties in their adaptation to and success in school, and where there is not enough counseling staff to do everything, this mode of behavior is quite understandable. It does, however, draw attention once more to the question raised earlier in this chapter; in the long run, what is the most useful behavior for the counselor to engage in? This "fighting the brushfires" activity is certainly vital, and can rescue many individuals who are headed for worse trouble, but it also misses many individuals. Will it not be more effective in the long run for the counselor to spend his time in trying to prevent the causes of the brushfires? As long as the school system is unwilling to pay for both kinds of activity, this is a hard decision, but one to which the counselor should give more thought than he has been likely to do in the past. Certainly a partial solution, in schools with two or more counselors, is a division of duties in terms of the personal strengths of each counselor; and even a single counselor can work at both roles.

(B) For most counselors and counselor educators, the first reaction to the expenditure of time in nonguidance functions is to write it off as a complete waste. There are, however, a few small indications in the present study that may permit the raising of a question or two. For example, there is a slight but persistent tendency, strongest in low-ability schools and one-counselor schools, for the amount of nonguidance to be predictive of more students

¹There is also a tendency for guidance programs in these schools to be relatively less well supported.

going on to post-high education and more vocational maturity along with better achievement. Coupled with the fact that the presence of a highly rated counselor (see next section) also predicts these outcomes, one is tempted to raise the question as to whether certain activities labelled nonguidance do not in fact have more guidance value, when carried out by good counselors, than do certain so-called guidance activities (such as test scoring, filling out student folders). Many students in the present study indicated that they would go to see a teacher or coach, rather than a counselor, with personal problems, because they felt they knew and trusted the teacher or coach. Many students also complained that they never saw the counselor, and wished that he would come out and mingle more with them so that they might get to know him as a person. Taken together, such bits of evidence as these point toward a recommendation. Rather than rejecting all activities that are usually labelled "nonguidance" as being timewasting or unprofessional, counselors would do well to carefully sort out those activities which are really menial tasks or the proper functions of principals and others from those activities which might actually have guidance value by making the counselor more visible and real to students while at the same time providing opportunities to engage in informal if not formal guidance.

3. The level of support of the guidance program, in terms of furnishing enough counselors, providing budgetary support, clerical help, materials, and general moral and psychological support, does make a difference in what happens to students, although the relationships are very modest. It appears evident that adequate support for the guidance program is a necessary but not sufficient condition for increasing the effectiveness of guidance. Continued and increased support should be accompanied by insistence upon and encouragement and support of more effective counselor roles than has been true in the past in many schools.

The Image of the Counselor

It has often been said that the value of counseling, and of other interpersonal relationships such as those in which guidance workers are engaged, is dependent upon a rather elusive set of attributes or conditions that may be called the quality of the relationship. Any study of guidance must try to come to grips with this qualitative aspect of interpersonal relationships, but if measurements are to be made, some sort of quantifications must be attempted. A very real problem arises concerning the extent to which quality in this sense can be quantified, without losing its very essence. Wilkinson says, "In a computerized society, values as such cannot get into the mathematical language of the computer network. The numbers that are supposed to express value turn out to have a very ambiguous relationship to valuational feelings." (6:p. 2) In the present study, some attempts to quantify quality were perhaps more successful than others.

There are, for example, complex valuational processes involved in career choice, which help to determine which choice leads to vocational stability and deep satisfaction, and which does not. The simple quantitative indices used in this study, such as discrepancy between "ideal" and real choice and the like, do indeed have very ambiguous relationships to the important valuational processes involved, and as measures of desirable ends they did not appear to be very useful.

On the other hand, it appears that the attempt to get a quantitative measure of the way in which people perceive and respond to the counselor was considerably more successful. It appears that students and observers, when given even rather crude instruments or guides to use in responding, are able to differentiate counselors who have a real impact on students' behavior from counselors who do not. The counselors they describe as open, understanding, accepting, interested in them, and able to function well with colleagues are the counselors in those schools where more positive results of guidance are found. Thus it turns out that the most qualitative, valuational measure of the most complex aspect of the guidance program, the counselor himself, is the most useful measure; and it also turns out that the counselor as a human being, rather than any specified guidance function he performs, affects the lives of students the most.

There are some implications in this finding for counselors, counselor educators, and schools. It reemphasizes the need, in counselor preparation, of the development of sensitivity and skill in interpersonal relations not only with students but with colleagues and other adults--attributes that imply strong emphasis on the practice aspects of preparation, such as practice in individual and group counseling, parent and teacher consultation, and group sensitivity training.¹ It implies the need for screening and recommendations based upon the success of this aspect of a counselor's education as well as the more usual cognitive aspects. It implies the need for school authorities to consider this aspect of the counselor's personal attributes in employing him, if they want results. And it implies the need for counselors to seek in-service training to strengthen their interpersonal sensitivity and skills.

Counselor Roles and Counselor Functions

In visiting with counselors and in collecting and analyzing the data of this study, the writer has been impressed by what appears to

¹There is no intent in these statements to imply lack of importance of the cognitive aspects of counselor training; the study provides no evidence either way on this question, since it was not possible to include specifics of counselor training as a variable.

be the lack of any clear-cut role-identity on the part of counselors, despite a number of definitions of counselor role in the literature.¹ Counselors are often busy carrying out functions which they choose to perform, which have "always been performed" in that school, or which they are asked or required to perform. It seems evident that one of the reasons counselors are not more effective is that they are not clear about the basic role they should play in furthering the educational enterprise.²

If counselors clearly envisioned what their role should be, they would know whether or not any given function is appropriate to that role, because functions should be determined by roles. Without role definition, they have no firm basis on which to decide whether or not it is appropriate to sell gym shoes, or to act as assistant principal as many are doing, and thus find it hard to resist taking on duties which are wished upon them. On the other hand, having learned that certain functions are theirs, they are unable to see the possible relationship between functions not traditionally given to them and the role they should be playing. They may, for example, resist carrying out functions which would put them into intimate and worthwhile contact with students on the grounds that these are not "proper guidance functions."

Referring specifically to ways of functioning found in the present study, it seems evident that lack of role-clarity may result in a counselor's deciding to see all students in somewhat ritualistic fashion through scheduled interviews, spend all of his time in working with students with special problems, allocate his time equally among each of the so-called proper guidance functions, and the like.

It is easy enough to say, "know thy role;" the reader has a right to ask what, if any, conclusions as to counselor role derive from the present study. Essentially, the answer has already been given in the report of the findings. To summarize and draw it together, the writer believes that the counselor is there to use his special skills to assist the school, to the best of his ability, in carrying out its task of facilitating the fullest and richest possible development of the students. To the writer this implies not only mastery of the skills required for competence in coping with the environment, but development in a much broader sense. This other aspect of full development cannot be spoken of with the same

¹Among the more recent treatments of counselor role are Blocher (1: Chapters 1, 2, and 3) and Patterson (4:Part III and especially the ASCA statement, Chapter 19).

²Counselors are not alone in this respect; teachers and administrators too become immersed in traditional or accidental functions and fail to consider the roles which the educational enterprise should actually be carrying out.

precision and parsimony as the first, but it is no less real for that. It is the development of a human being who values, and who reflects in his behavior, such qualities as authenticity, trustworthiness, altruism, imagination, creativity, uniqueness, having dreams of what is not but could be, having positive regard for self and others and valuing persons above things.

Using his special skills and competencies, the counselor fulfills his role by:

1. being a humanizing agent, a focal point of genuine warmth, understanding, openness, acceptance, and respect for students and staff alike, and through his personality and behavior generating a force for the facilitation of the full development of persons within the school environment;
2. doing all that he is able to create an awareness of and facilitate change in those aspects of the school situation (including the behavior of staff members) which clearly act as impediments to the full development of individual students; and
3. serving as a special kind of personal helper to those individual students who, for one reason or another, are not developing as well as they could be, or who need the counsel of a mature adult.

The role definition above derives from the observations made as to what counselors are now doing effectively and what they are not doing that seems to need to be done, but it also reflects the writer's own biases as he views the current and projected educational scene. Other educators and counselors may not agree with this role definition, but what is important is that they think through and define the counselor role in ways that are meaningful, clear, and justifiable to them. Once this is done, it will no longer be necessary to carry out functions merely because they are traditional or expected; it will be possible to determine what to do and how to do it on the basis of the role that has been defined. Then, whether the counselor sits and listens to a student who needs to relate to an understanding adult, or designs experiences to modify a student's behavior, or consults with a teacher about the way her behavior affects students, or works with the student council to help youth in its struggle to grasp the implications of responsible power, or intervenes with the administration or community to change conditions which are preventing healthy student growth, he will know why he is doing it and how it relates to his fundamental role--and he will be more effective.

The role delineation above was addressed to the counselor, the focus of the present study. It does not in any sense imply that the counselor should pre-empt the roles of teachers, administrators, or other personnel workers, but rather that all of these people together should be seeking new and better ways to cooperate in making the

total educational experience better for the student, with each contributing his own special competencies to the enterprise.

Once again, it must be noted that the carrying out of such roles as those described means fundamental changes in counselor education programs, in counselors' professional self-concepts, and in administrative perceptions of and support for what counselors should be doing. But without such changes, it seems unlikely that counselors can become more effective than they seem to be today.

Summary

The study reported here was the beginning of a search for evidence of the "total impact" of guidance programs on the entire student body for whom they are presumably intended, using a large number of indices and measures. It is evident that at each step described in the earlier chapters, the results or lack of them present challenges and suggestions for further research, not only more intensive and carefully controlled studies of specific aspects of guidance but also replication of the entire study with other schools in other areas, using some of the indices used here but also additional and improved measures.

The always modest, sometimes inconsistent and unexpected, often negligible relationships found between guidance programs and expected results prompt a serious concern about the amount of impact that formalized guidance efforts have on students. These findings do not, however, suggest to the author the abandonment of such programs. It is evident that students continue to have many kinds of problems which interfere with their maximal development, and there can be no doubt that some guidance programs do help some students in coping with some of these problems. Since the problems are not going to disappear and help will continue to be needed, the implication is that guidance programs should be improved, not removed.

A "total impact" study such as the present one forces consideration of the question, "who is the guidance program really for?" Is it actually for all of the students, or is it simply meant to be available to all, as they have a need for or choose to avail themselves of it? In practice, guidance programs have tended to be simply available to students, except for a few "across the board" activities such as school-wide testing, orientation, and career days. If, in fact, the basic intent of guidance workers is simply to be available, and to help those students who avail themselves of the services, then total impact studies which sample the entire student body randomly are misleading and in a sense unjust ways of assessing the value of guidance.

The point of view taken here, however, is that the guidance program should exist for the actual benefit of all students, and

the counselor's role has accordingly been defined to include not only the traditional help to individual students who experience difficulties, but also the provision of such leadership as his special strengths permit in making the school environment maximally conducive to the full growth and development of students, and the provision of a strong, warm, humanizing influence in the midst of the complex busyness of mass education. A few years ago, changes in counselor role might not have been accepted; but today, with educational practices in flux and innovative ideas capturing the imagination of educators across the land, changes in the traditional functions of counselors are not only possible but may well be demanded. And the results of the present study, both positive and negative, suggest changes in counselor role to increase the effectiveness of guidance, and also directions for change as presented here.

In order to bring about meaningful changes, counselors need to think deeply about the basic reasons for the existence of guidance programs, and about their own roles and functions as they relate to these basic reasons. They need to reconsider the relative value of time spent in remedial, preventive, and developmental aspects of guidance. And most of all they need to seek ways of upgrading their research and human relations skills and their interpersonal sensitivity and effectiveness, if they hope to play a larger role in improving and humanizing education as well as helping individuals.

Counselor educators, too, need to re-examine their programs in very fundamental ways, rather than simply adding a few courses to lengthen the preparation time. Furthermore, ways need to be found of making inservice training sufficiently rewarding so that counselors now in the field will seek to improve their skills.

Finally, school administrators need to recognize the possibility that their counselors can play an exciting, broad, and effective role in facilitating the total educational endeavor, and to provide strong support and encouragement for such a role, including support for appropriate inservice training.

REFERENCES

1. Blocher, Donald H. Developmental Counseling. New York: The Ronald Press Company, 1966.
2. Grams, Armin. Facilitating Learning and Individual Development: Toward a Theory for Elementary Guidance. St. Paul, Minnesota Department of Education, 1966.
3. Hunt, J. McVicker. "The Psychological Basis for Using Preschool Enrichment as an Antidote for Cultural Deprivation." From Experience, Structure, and Adaptability, O. J. Harvey, ed., New York, Springer Publishing Company, 1966, pp. 235-276.

4. McDill, E. L., et. al. Sources of Educational Climates in High Schools. Cooperative Research Project No. 1999. Johns Hopkins University, 1966.
5. Patterson, Cecil H. (Ed.) The Counselor in the School: Selected Readings. New York: McGraw-Hill, 1967.
6. Wilkinson, John. "The Quantitative Society or, What Are You Going to Do With Noodle?" An Occasional Paper by the Center for the Study of Democratic Institutions. New York: The Fund for the Republic, Inc., 1964, 32 pages.

OFFICE OF EDUCATION

ERIC REPORT RESUME

ERIC ASSESSION No.					
CLEARING HOUSE ASSESSION No.	RESUME DATE	P.A.	T.A.	IS DOCUMENT COPYRIGHTED? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
	6-20-68			ERIC REPRODUCTION RELEASE? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
TITLE GUIDANCE PROGRAMS AND THEIR IMPACT ON STUDENTS: A SEARCH FOR RELATIONSHIPS BETWEEN ASPECTS OF GUIDANCE AND SELECTED PERSONAL-SOCIAL VARIABLES					
PERSONAL AUTHORS Tamminen, Armas W. (Project Director) and Miller, G. Dean (Assistant Director)					
INSTITUTION SOURCE Minn. State Department of Education, St. Paul, Minn 55101					
SOURCE CODE					
REPORT/SERIES No.					
SOURCE CODE					
OTHER SOURCE					
OTHER REPORT No.					
SOURCE CODE					
OTHER SOURCE					
OTHER REPORT No.					
PUBL. DATE June, 1968					
CONTRACT GRANT No. OE-5-85-035					
PAGINATION ETC. 298					
RETRIEVAL TERMS					
IDENTIFIERS					
ABSTRACT The major purpose was to begin the search for evidence, almost nonexistent now, of the total impact of guidance programs on the students they serve. The method was to investigate relationships (through intercorrelation) between guidance programs and personal and social variables that are commonly thought to be influenced by guidance efforts, on the assumption that students who have been exposed to varying amounts and levels of guidance should have achieved guidance objectives in varying degrees or numbers. Some 200 indices were used, in 84 schools, with 1,116 seniors plus school staff, graduates, and dropouts. Factor analysis produced a small number of less redundant scales, and regression analysis indicated the best combination of predictors for such outcomes. Relationships were generally very modest, prompting concern as to the impact of formalized guidance. Counselor personality was by far the most related to outcomes. Student and staff satisfaction as outcome was most related to guidance effort. Most other outcomes were more related to environmental factors than guidance. Guidance does help some students in some ways. Counselors should consider more active roles, help change environment to enhance healthy development, develop greater interpersonal sensitivity and skills. Counselor educators, school administrators should support and encourage such roles.					

APPENDIX A

	<u>Page</u>
a. Schools in Survey with Selected Data on Students in Sample	A-1a.
b. Distribution of Schools in the Sample by County	A-4b

SCHOOLS IN SURVEY WITH SELECTED DATA ON STUDENTS IN SAMPLE *

<u>Code</u>	<u>School</u>	<u>County</u>	<u>Tot.No.</u> <u>1964</u> <u>Grads</u>	<u>Total</u> <u>No.</u> <u>Samp.</u>	<u>No.</u> <u>Ret.</u>	<u>No. In</u> <u>Post-Hi-</u> <u>Sch.Trn.</u>	<u>No.</u> <u>Sch.</u> <u>Ret.</u>
1	Aitkin	Aitkin	115	12	11	3	3
2	Alden	Freeborn	40	10	7	7	7
3	Alex.-Ram.Sr. (Roseville)	Ramsey	545	18	15	13	12
4	Anoka	Anoka	566	21	17	8	7
5	Appleton	Swift	96	9	8	7	7
6	Austin	Mower	442	22	20	14	13
7	Barnesville	Clay	76	10	7	6	5
8	Big Lake	Sherburne	22	10	9	5	5
9	Biwabik	St. Louis	35	10	8	7	7
10	Brooklyn Center	Hennepin	126	12	8	4	3
11	Buhl	St. Louis	29	10	9	6	6
12	Cannon Falls	Goodhue	85	10	9	6	6
13	Carlton	Carlton	23	10	9	5	5
14	Chaska	Carver	89	10	9	6	6
15	Chisago City	Chisago	54	10	8	2	2
16	Crosby Ironton	Crow Wing	113	12	9	8	8
17	Deer River	Itasca	66	10	6	3	3
18	Delavan	Faribault	29	10	9	6	6
19	Duluth-East	St. Louis	357	21	17	15	13
20	Duluth-Central	St. Louis	317	22	15	10	10
21	Edina-Morn- ingside	Hennepin	566	23	17	17	15
22	Elbow Lake	Grant	60	10	6	1	1
23	Elkton	Mower	32	10	10	2	2
24	Fairmont	Martin	214	13	10	6	6
25	Fergus Falls	Ottertail	230	16	14	7	7
26	Franklin	Renville	17	10	7	2	2
27	Frazee	Becker	83	10	8	2	2
28	Glencoe	McLeod	111	11	10	3	3
29	Goodridge	Pennington	39	10	8	3	3
30	Grand Rapids	Itasca	300	19	16	9	9
31	Greenbush	Roseau	55	10	9	3	3
32	Greenway- Coleraine	Itasca	147	13	10	6	6
33	Halstad	Norman	27	10	10	8	8
34	Hawley	Clay	59	10	9	5	5

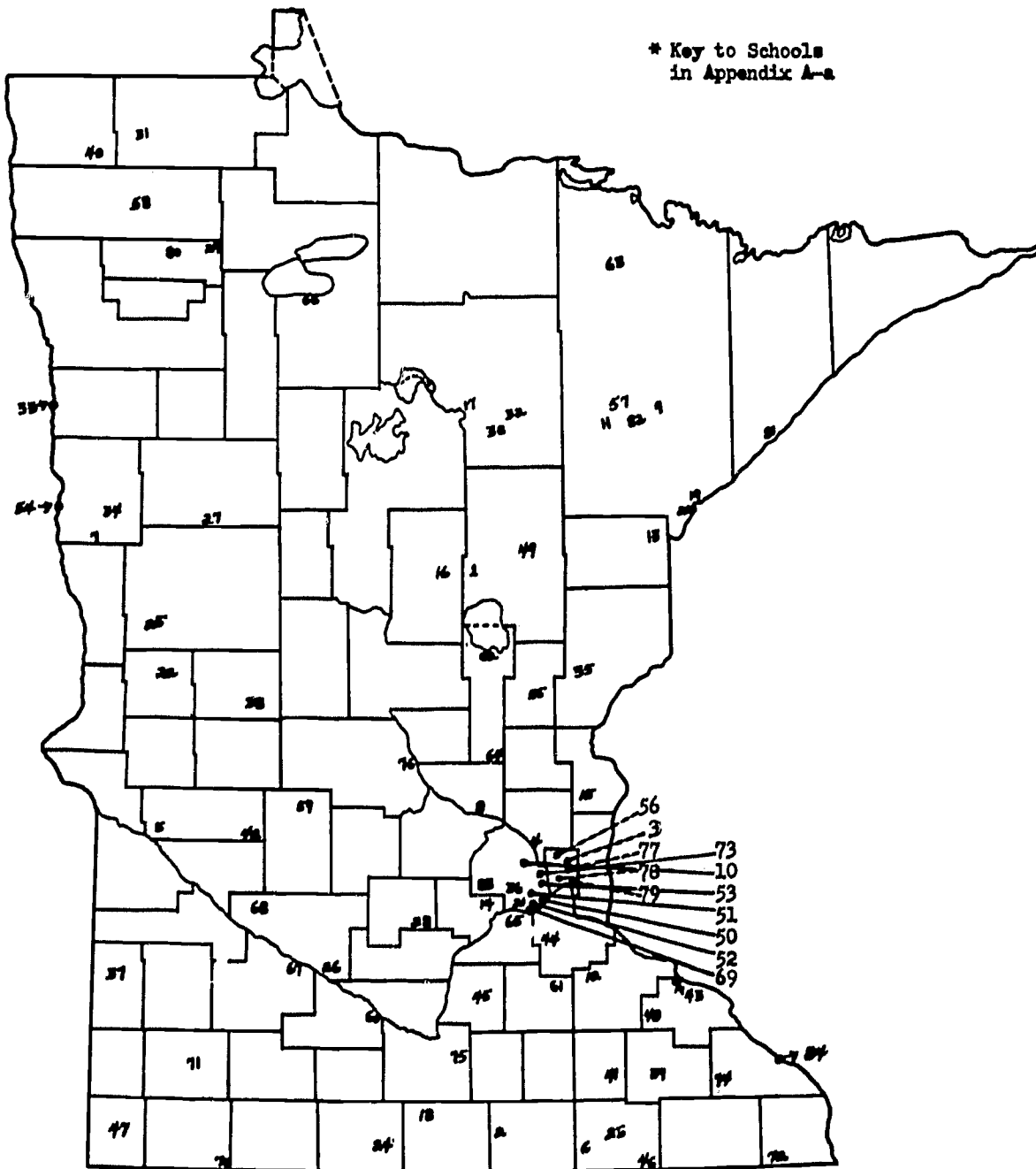
* A few of the figures on returns from students and colleges have been adjusted for returns that arrived too late for processing.

A-1a

<u>Code</u>	<u>School</u>	<u>County</u>	<u>Tot.No.</u> <u>1964</u> <u>Grads</u>	<u>Total</u> <u>No.</u> <u>Samp.</u>	<u>No.</u> <u>Ret.</u>	<u>No. In</u> <u>Post-Hi-</u> <u>Sch.Trn.</u>	<u>No.</u> <u>Sch.</u> <u>Ret.</u>
35	Hinckley	Pine	50	10	10	5	4
36	Hopkins	Hennepin	537	26	15	11	9
37	Ivanhoe	Lincoln	36	10	10	6	6
38	Jefferson-Alex.	Douglas	245	16	12	9	8
39	John Marshall, Sr. (Rochester)	Olmstead	578	25	19	14	14
40	Karlstad	Kittson	38	10	8	3	3
41	Kasson- Mantorville	Dodge	65	10	8	4	4
42	Kerkhoven	Swift	50	10	10	6	6
43	Lake City	Wabasha	99	12	10	4	4
44	Lakeville	Dakota	86	11	10	4	3
45	Le Center	LeSueur	55	10	8	3	3
46	Le Roy	Mower	40	10	9	3	3
47	Luverne	Rock	102	8	7	3	0
48	Mazeppa	Wabasha	31	10	7	2	2
49	McGregor	Aitkin	33	10	4	2	2
50	Mpls. Central	Hennepin	308	17	10	5	5
51	Mpls. Roosevelt	Hennepin	740	28	21	16	14
52	Mpls. Southwest	Hennepin	323	17	13	10	10
53	Mpls. Vocational	Hennepin	300	19	15	1	1
54	Moorhead	Clay	337	19	12	7	6
55	Mora	Kanabec	103	10	8	3	3
56	Mounds View	Ramsey	421	23	20	15	14
57	Mtn. Iron	St. Louis	55	10	7	5	5
58	Newfolden	Marshall	49	10	7	5	5
59	New London	Kandiyohi	61	10	8	5	4
60	New Ulm	Brown	146	11	10	5	5
61	Northfield	Rice	170	13	10	3	3
62	Onamia	Mille Lacs	65	10	9	3	3
63	Orr	St. Louis	23	10	7	4	4
64	Princeton	Mille Lacs	101	10	9	6	5
65	Prior Lake	Scott	47	10	8	5	4
66	Red Lake	Beltrami	28	10	1	1	1
67	Redwood Falls	Redwood	126	10	8	5	5
68	Renville	Renville	47	10	9	4	4
69	Richfield	Hennepin	630	29	22	18	16
70	Round Lake	Nobles	19	10	8	4	2
71	Slayton	Murray	82	10	9	4	4
72	Spring Grove	Houston	50	11	8	5	5
73	St. Anthony Village	Hennepin	67	10	6	4	3

<u>Code</u>	<u>School</u>	<u>County</u>	<u>Tot.No.</u> <u>1964</u> <u>Grads</u>	<u>Total</u> <u>No.</u> <u>Samp.</u>	<u>No.</u> <u>Ret.</u>	<u>No. In</u> <u>Post-Hi-</u> <u>Sch.Trn.</u>	<u>No.</u> <u>Sch.</u> <u>Ret.</u>
74	St. Charles	Winona	55	10	9	4	4
75	St. Clair	Blue Earth	24	10	7	6	6
76	St. Cloud Technical	Stearns	420	23	17	11	9
77	St. Paul Harding	Ramsey	412	24	17	7	4
78	St. Paul Humboldt	Ramsey	198	13	10	3	1
79	St. Paul Murray	Ramsey	162	12	9	7	7
80	Thief River Falls	Pennington	184	14	11	8	8
81	Two Harbors	Lake	128	12	9	4	4
82	Virginia	St. Louis	183	15	13	8	8
83	Wayzata	Hennepin	186	15	14	7	6
84	Winona	Winona	277	17	9	6	5
<u>TOTALS</u>			13,637	1,113	871	508	470

* Key to Schools
in Appendix A-a



Am-4b

APPENDIX B, SURVEY INSTRUMENTS *

	<u>Page</u>
a. General Information Questionnaire	B-1a
b. General Guidance Questionnaire	B-7b
c. Individual Counselor Questionnaire	B-15c
d. Teacher Questionnaire	B-17d
e. Student Questionnaire	B-21e
f. "What Your School Is Like"	B-27f
g. Adjective Scale (IAV)	B-29g
h. Academic Self-Estimate	B-31g & h
i. Titles of Four Published Instruments	B-33i
j. Training Success Check Off Form	B-34j & k
k. Next Year's Plans Form (top and bottom 15%)	B-34j & k
l. Former Student Questionnaire	B-35-l
m. High School Graduate Questionnaire	B-39m
n. 1966 Graduate Questionnaire Follow Up	B-43n

* The forms given here are copies fitted to the reduced page size of this report. The original forms were, of course, more appropriately arranged on larger sized forms.

Project Number 095
Contract Number 5-85-035

STATE OF MINNESOTA
DEPARTMENT OF EDUCATION
CENTENNIAL OFFICE BUILDING
ST. PAUL 1, MINNESOTA

MINNESOTA GUIDANCE RESEARCH

General Information Questionnaire

This questionnaire is directed to the administrator or person in charge of the building because he has the best knowledge of or easiest access to most of the information requested. Should the administrator wish to delegate part of the filling in to other appropriate personnel, it is essential that the administrator himself fill in at least the first and the last questions. If other personnel work on the form, it is requested that these two questions be answered after the form is returned to the administrator.

Name(s) and title(s) of person(s) completing the form _____

Name of School _____ Code No. _____

No. of students, grades 10-12 _____ Date _____

DIRECTIONS: This study in which you have agreed to cooperate is a pioneer effort in the direction of evaluating guidance. The purpose of this study is to seek out relationships between the many things that are done in the name of guidance, and certain measurable personal-social variables that are thought to be outcomes of guidance. This is in no sense an evaluation of your individual school, and NO ONE will know how your school compares with any other school in any of the areas in which information is collected. Your answers are completely confidential, and it is very important that you give as accurate information as is possible. Please answer the questions frankly and accurately.

You will note that most of the questions pertain to aspects of your school and community other than guidance. It is very important to assess these variables, because they may well have a bearing on supposed outcomes which would be mistakenly attributed to the absence or presence of guidance if we did not know of the existence of these other related factors.

It is not necessary to spend a great amount of time looking up the answers in detail, but please give the very best estimates you can where precise answers are not available. Please do not leave any questions blank.

Please keep this questionnaire in your possession after filling it out. A team of field workers will visit your school, discuss the form with you, and pick it up at that time. Make any comments you wish on the form, using the back of the form, if you need more space; you may also wish to comment to the field workers when they pick it up.

Thank you for your cooperation.

1. To what extent were you involved in determining the role and function of counselors in your school? Explain briefly.
- 2-3-4. How many students do you expect to graduate this spring (1966)?__
5. How has your senior high school enrollment changed this year as compared with last year?
 It has increased_____percent
 It has decreased_____percent
 It has not changed_____
6. What percent of your grade 10-12 teachers are men? _____percent.
7. What percent of your grade 10-12 teachers hold advanced degrees or have graduate work equivalent to an M. A. degree? _____percent.
8. What is the average number of years of teaching experience of your present teaching staff? (Your teachers probably have a wide range of experience, but what is most typical of the group?) _____years.
9. What is the average salary of your grade 10-12 teachers this year?
10. How many school days are there in your school year this year? (Do not count holidays) _____days.
11. What is the usual length of a class period in grades 10-12? _____minutes.
12. How many students are there in your typical English and social studies classes? _____students.
13. What is the total number of subjects offered in your school, grades 10-12? (Count any course offered for a semester or more) _____subj.
14. In how many of these subjects do you have ability grouping or homogrouping (such as basic math, enriched social studies, accelerated English, and the like)? _____subjects.
15. Indicate briefly the factors or variables on which ability-grouping is based, if you do such grouping.
16. For which of the following special groups does your school provide special, separate classes?
 ____A. Low IQ or mentally retarded ____F. Speech problems
 ____B. Behavior or adjustment problems ____G. Rapid learners
 ____C. Reading difficulty ____H. Other (specify)_____
 ____D. Mathematics difficulty
 ____E. Physically handicapped (specify)_____
 ____I. We have no spec. classes

17. In which of the following areas does your school (grades 10-12) have some sort of special experimental program being tried out? (Include here the use of teaching machines or programmed learning on a full-class scale)

- ☐ A. In four or more areas (math, science, English, social studies, etc.)
☐ B. In three areas
☐ C. In two areas
☐ D. In one area
☐ E. In no area

18. Which of the following types of special recognition for scholastic achievement are available in your school? Check all that apply.

- ☐ A. National Honor Society or equivalent
☐ B. Honor roll or other published list
☐ C. Privilege of taking additional work
☐ D. Honors course or other special classes
☐ E. Special awards or prizes for scholarship
☐ F. Honors diploma
☐ G. Other recognition (specify) _____

19. What extra-curricular activities are offered by your school? Mark as many as apply. (Some may carry credit; check only if they are also extra-curricular)

- | | |
|---|--|
| <input type="checkbox"/> A. Student government | <input type="checkbox"/> M. Hobby clubs |
| <input type="checkbox"/> B. School newspaper | <input type="checkbox"/> N. Drama, plays |
| <input type="checkbox"/> C. Annual or school magazine | <input type="checkbox"/> O. Debate |
| <input type="checkbox"/> D. Orchestra | <input type="checkbox"/> P. National Honor Society |
| <input type="checkbox"/> E. Band | <input type="checkbox"/> Q. National Forensic League |
| <input type="checkbox"/> F. Glee club(s) | <input type="checkbox"/> R. Thespians |
| <input type="checkbox"/> G. Inter-school boys' athletics | <input type="checkbox"/> S. Dance groups |
| <input type="checkbox"/> H. Inter-school girls' athletics | <input type="checkbox"/> T. Service clubs |
| <input type="checkbox"/> I. Intramural boys' athletics | <input type="checkbox"/> U. Religious clubs |
| <input type="checkbox"/> J. Intramural girls' athletics | <input type="checkbox"/> V. Other (specify) _____ |
| <input type="checkbox"/> K. Social clubs | |
| <input type="checkbox"/> L. Subject matter clubs | |

20. Indicate by checking which of the following facilities are provided for your pupils.

- | | |
|--|---|
| <input type="checkbox"/> A. Health examination | <input type="checkbox"/> P. Television receiver(s) |
| <input type="checkbox"/> B. Health Clinic | <input type="checkbox"/> Q. Radio(s) |
| <input type="checkbox"/> C. Hot lunch program | <input type="checkbox"/> R. Teaching machines, programmed texts |
| <input type="checkbox"/> D. School doctor | <input type="checkbox"/> S. Phonographs or hi-fi |
| <input type="checkbox"/> E. School dentist | <input type="checkbox"/> T. P. A. system to rooms |
| <input type="checkbox"/> F. Teacher of "home bound" | <input type="checkbox"/> U. Assembly programs |
| <input type="checkbox"/> G. School cafeteria | <input type="checkbox"/> V. Study halls |
| <input type="checkbox"/> H. Gym and locker rooms | <input type="checkbox"/> W. Physics lab and equipment |
| <input type="checkbox"/> I. Swimming pool | <input type="checkbox"/> X. Chemistry lab and equipment |
| <input type="checkbox"/> J. Ath. field and/or playgrd. | <input type="checkbox"/> Y. Biology lab and/or equip. |
| <input type="checkbox"/> K. Auditorium | <input type="checkbox"/> Z. Other labs and/or equipment |
| <input type="checkbox"/> L. Sound movie projector(s) | <input type="checkbox"/> AA. Extension or post grad. crses. |
| <input type="checkbox"/> M. Slide projector(s) | <input type="checkbox"/> BB. Summer school |
| <input type="checkbox"/> N. Closed-circuit TV | <input type="checkbox"/> CC. Other (specify) _____ |
| <input type="checkbox"/> O. Tape recorder(s) | |

21. Which of the following community facilities are readily available to the students in your school? Check all that apply.

- | | |
|---|--|
| <input type="checkbox"/> A. Public library | <input type="checkbox"/> I. Art Gallery |
| <input type="checkbox"/> B. Museum | <input type="checkbox"/> J. Opera |
| <input type="checkbox"/> C. Community concerts | <input type="checkbox"/> K. Professional Theater |
| <input type="checkbox"/> D. Scouting | <input type="checkbox"/> L. Junior Achievement Program |
| <input type="checkbox"/> E. Teen-age center(s) | <input type="checkbox"/> M. YWCA |
| <input type="checkbox"/> F. Community amateur theater | <input type="checkbox"/> N. YMCA |
| <input type="checkbox"/> G. 4-H Club | <input type="checkbox"/> O. Other (specify) _____ |
| <input type="checkbox"/> H. Recreation Center | |

22. Most of the pupils in this school come from areas which are best described as being primarily:

- | | |
|--|--|
| <input type="checkbox"/> A. Suburban residential | <input type="checkbox"/> E. Suburb. commercial (bus.) |
| <input type="checkbox"/> B. Urban residential | <input type="checkbox"/> F. Urban commercial (bus.) |
| <input type="checkbox"/> C. Mixed-scattered through town | <input type="checkbox"/> G. Suburban industrial (mfg.) |
| <input type="checkbox"/> D. Rural | <input type="checkbox"/> H. Urban industrial (mfg.) |
| | <input type="checkbox"/> I. Other (describe) _____ |

23. Check the phrase that best describes the typical or most frequently found family income situation in the families served by your school: (If you have a clearly bimodal situation, check both "typical" groups)

- | |
|---|
| <input type="checkbox"/> A. Almost always short of the necessities of life |
| <input type="checkbox"/> B. Often have difficulty in making ends meet |
| <input type="checkbox"/> C. Sometimes have difficulty getting the necessities |
| <input type="checkbox"/> D. Have most necessities but almost no luxuries |
| <input type="checkbox"/> E. Comfortable; have a few luxuries |
| <input type="checkbox"/> F. Quite well-to-do; have most things they really want |
| <input type="checkbox"/> G. Well-to-do; have practically all they want |
| <input type="checkbox"/> H. Wealthy |

Approximately what percent of your SENIORS are in each of the following programs?

- | |
|--|
| <input type="checkbox"/> 24. College preparatory |
| <input type="checkbox"/> 25. Approved <u>vocational</u> business and/or office practices |
| <input type="checkbox"/> 26. Approved <u>vocational</u> industrial or trade sequences |
| <input type="checkbox"/> 27. Approved <u>cooperative</u> programs (including distributive) |
| <input type="checkbox"/> 28. Vocational agriculture sequence program |
| <input type="checkbox"/> 29. Special program for the mentally retarded |
| <input type="checkbox"/> 30. Other (general, combination, or some special program) |

100 % TOTAL

NOTE: The number sequence is out of order at this point; the next question is No. 33.

33. The distance from your school to the nearest college (including Jr. college) is approximately _____ miles.

34. The distance from your school to the nearest center offering fairly broad vocational or trade training opportunities is approximately _____ miles. (Note: do not include a location offering just one kind of training, such as beautician, etc.)

35. About what percent of all boys who enter your 10th grade drop out before graduation? (Please estimate as carefully as possible, and do not include transfers). _____ percent.

36. About what percent of all girls who enter your 10th grade drop out before graduation? _____ percent.
37. About how many of your grade 10-12 students go on probation from any court, and/or are committed to correctional institutions, in a typical year? _____
38. About how many of your grade 10-12 students are hospitalized or receive out-patient treatment for emotional problems in a typical year? _____
- Percent of last year's class: _____ Who entered

Boys Girls

39-40. College

41-42. Vocational-technical training

43. About what percent of your grade 10-12 students are repeating one or more courses (or repeated them in summer sessions) because of failure to achieve satisfactorily last year? _____ percent.
44. Salary Budget for Guidance, 1965-66
- A. Total salaries paid out for counselors. (Include total salaries for all full-time counselors. If someone works part-time in guidance, include that portion of his salary; e.g. a person spends $\frac{1}{4}$ time in guidance; use $\frac{1}{4}$ salary) _____
- B. Clerical salaries. (Include only that portion of salary proportionate to time spent working for counselor or in work for the guidance department. _____ TOTAL _____)
45. Changes in Guidance. During the past five years, what has been happening in your guidance program with respect to each of the following points:

<u>Much</u>	<u>Some</u>	<u>No</u>	
<u>Increase</u>	<u>Increase</u>	<u>Change</u>	<u>Decrease</u>
_____	_____	_____	A. No. of counselors on the staff
_____	_____	_____	B. Student-counselor ratio ("increase" means <u>lower</u> ratio)
_____	_____	_____	C. Level of professional training of counselors
_____	_____	_____	D. No. of student personnel workers other than counselors
_____	_____	_____	E. Amount of clerical help assigned to counselors
_____	_____	_____	F. Amount of standardized testing done
_____	_____	_____	G. Participation in national or state-wide testing
_____	_____	_____	H. Use of test results by the staff
_____	_____	_____	I. Information recorded in student's file
_____	_____	_____	J. Referral sources available to the school
_____	_____	_____	K. File of occupational information

<u>Much</u> <u>Increase</u>	<u>Some</u> <u>Increase</u>	<u>No</u> <u>Change</u>	<u>Decrease</u>	
_____	_____	_____	_____	L. Teacher participation in guidance
_____	_____	_____	_____	M. Placement activities (job, college, vocational school, etc.)
_____	_____	_____	_____	N. No. of guidance-type contacts with parents
_____	_____	_____	_____	O. Amount of educational-occupational information available to students
_____	_____	_____	_____	P. Amount of counselor's time available for actual counseling

46. How well do you feel your present guidance program is meeting your student's needs? Consider not only the counseling and other work done by the counselor(s), but all other aspects of guidance as carried out in your school.

Please put a check mark on the scale below at the point you feel most accurately represents the extent of your satisfaction with your present program. On this scale, a check at level "9" would indicate that you are completely satisfied that the program is as fully adequate as a guidance program can be in meeting the needs of your pupils. A check at level "1" would indicate that you are completely dissatisfied, and feel that the guidance program is doing little or nothing to meet the needs of your pupils (or that you have no guidance program at all).

1	2	3	4	5	6	7	8	9
Completely Dissatisfied								Completely Satisfied

Project Number 095
Contract Number 5-85-035

STATE OF MINNESOTA
DEPARTMENT OF EDUCATION
CENTENNIAL OFFICE BUILDING
ST. PAUL 1, MINNESOTA

MINNESOTA GUIDANCE RESEARCH
General Guidance Questionnaire

This questionnaire is intended to be answered by the counselor or person primarily in charge of the guidance program of the school, or by the counselors together if there is more than one.

Person(s) answering questionnaire. Please give names of person or persons involved in completing this form. If a person responsible for guidance but not a counselor answers, please indicate what your primary function is (e.g. principal): _____

Code _____

Name of School _____ Date _____

DIRECTIONS: Your school has been selected at random as one of 85 Minnesota schools to participate in a study, the purpose of which is to seek out relationships between the amount and kind of guidance efforts expended, on the one hand, and variations in certain personal-social attributes of students assumed to be related to guidance, on the other, as these are found in various environmental situations. This is a pioneer effort in the area of guidance evaluation.

The value of this study will depend very largely on the accuracy of your answers to this questionnaire. Neither you nor your school will be identified in any way in the report, nor will any comparisons be made between your school and any other. Your answers will be known to no one except the members of the research team, and will be retained in the strictest confidence. Please answer each question as honestly and accurately as you can. You should not discuss this form or your answers with your administrators or others, since on this form we want your judgments and evaluations. Other information will be collected from the administration.

Please **KEEP THIS FORM** in your possession until the field workers arrive at your school. They will wish to visit with you and will pick up the form.

Feel free to write any comments you wish on any items, using the backs of the pages if you need more space, and referring to the item on which you comment. Follow specific directions on the ensuing pages. Where

it is necessary to estimate or make judgments, simply make the most accurate judgment you can without spending excessive time in trying to recall details.

- 1-4. A. This school provides counseling and guidance services for students in the following grades (check all that apply):

_____12_____11_____10_____9_____8_____7_____other
(Please explain) _____

B. What is the total number of pupils for whom counseling and guidance services are available? _____

C. What is the number of full-time equivalent counselors in this school? _____ (E.g. 4 periods out of 6 assigned for counseling is 2/3 full-time counselor).

D. What is the student-counselor ratio (line "B" above divided by line "C")? _____

5. This school has been fully NDEA approved (guidance and counseling) for _____ years.

6. This school has had a formal guidance program, including assigned counseling time, for _____ years.

7. In addition to school counselors, this school has the following number of other specialists' services available: (If a part-time person is available, or services purchased, estimate the fraction of a person available to your school. For example, if a school nurse is available one day a week, this would constitute approximately 1/5 time and under "number of nurses" you would enter 1/5. Available time should be considered in light of other schools that must be served.)

_____ number of school psychologists

_____ number of school social workers

_____ number of school nurses

_____ number of speech correctionists

_____ number of remedial reading teachers

_____ number of special teachers (for mentally retarded, etc.)

_____ number of other workers (specify who) _____

8. Indicate the availability of the following referral services, by placing a number before each, rating them as follows:

3. Readily available and used as needed

2. Available with some difficulty; used sparingly

1. Not available

_____ A. Minnesota State Employment Services

_____ B. Mental Health Center Services

_____ C. County Welfare Services

_____ D. Vocational Rehabilitation Services

_____ E. University or College Counseling Services

_____ F. Private Psychiatric or Counseling Services

_____ G. Family Service Agency

_____ H. Other guidance referral services (please specify) _____

9. The amount of clerical time available for guidance-related work is:

- ☐ A. None
- ☐ B. Some, but less than one day per week per counselor
- ☐ C. One to two days per week per counselor
- ☐ D. Over two but less than 5 days per week per counselor
- ☐ E. Five days or more per week per counselor

Rate the next eleven items (10-20), using the following scale, by placing appropriate number in the blank space:

- 5. Outstanding in this respect
- 4. Fully adequate
- 3. Fairly adequate
- 2. Inadequate
- 1. Missing (or not available) (or does not occur)

- 10. ☐ Money for guidance (materials, supplies, travel, etc.)
- 11. ☐ To what extent does the administrator (i.e., the person in charge of your building) actively encourage and support guidance, by such means as describing your role to teachers and parents, scheduling so that students are permitted to see counselor, providing opportunity to attend professional meetings, and the like?
- 12. ☐ To what extent does the administrator actively promote the participation of the teachers in helping students in their personal growth?
- 13. ☐ To what extent does the Board of Education show interest in and support for the guidance program?
- 14. ☐ To what extent do the teachers themselves typically help pupils in their personal growth by extra-class interest and personal contact?
- 15. What is the extent of teacher-counselor cooperation in guidance?
 - ☐ A. Teachers involved in guidance planning through faculty committee or equivalent.
 - ☐ B. Counselor and teachers work together in cooperative, guidance-related functions such as testing, homeroom activities, occupational units, etc.
 - ☐ C. Counselor involved in staff development meetings to keep teachers informed of guidance services, use of records, increasing understanding of tests, etc.
 - ☐ D. Teachers and counselor work together regarding individual student growth and personal problems.
 - ☐ E. Teachers and counselors work together with parents.
- 16-20. Adequacy of guidance facilities
 - ☐ A. Privacy: soundproofing; private phone; test security; confidentiality of counseling records; separate entrance from administrative offices, etc.
 - ☐ B. Adequacy: total space is adequate; record storage; conference room (or room for group meetings, testing, etc.)
 - ☐ C. Convenience: easy access for students; student records easily available; testing facilities provided, etc.

_____ D. Other conditions: attractive, pleasant office, properly ventilated, etc. (Indicate other features if applicable).

21. Rate each item using the scale below, indicating the amount of information in the students' permanent record or cumulative folders in each area.

3. Quite complete information of this type
2. Some information
1. No information

- _____ A. The parents and family (education, occupation, siblings, marital status, special talents and/or problems, etc.)
_____ B. Health status of student (height, weight, vision, hearing, illnesses, special problems or handicaps, etc.)
_____ C. Scholastic progress (grades, courses, schools attended, special retention or promotion, special classes or sections, reasons for change in course patterns, achievement test scores, etc.)
_____ D. Interest and aptitude test scores
_____ E. Other evidence of ability, interests, vocational development (vocational preference, hobby or leisure time interests, special talents, honors record, etc.)
_____ F. Personal development (personality tests, special socialization problems, citizenship record, autobiography, etc.)
_____ G. Attendance record
_____ H. Honors and awards
_____ I. Teacher and/or counselor observations and anecdotes
_____ J. Co-curricular activities
_____ K. Entry and withdrawal information
_____ L. General interview notes (but not confidential information)
_____ M. Other guidance information (specify)

22. Check each of the three columns below at the appropriate level of use of the student records or cumulative folder for purposes of helping students or related to guidance:

<u>Used by:</u>		
<u>Administrator</u>	<u>Teachers</u>	<u>Counselor(s)</u>
_____	_____	_____ A. Considered very important and very frequently used.
_____	_____	_____ B. Considered important and quite frequently used.
_____	_____	_____ C. Some importance attached, and used occasionally.
_____	_____	_____ D. Seldom used.
_____	_____	_____ E. Practically never used.

23. A. Fill in or check as appropriate to indicate extent and administration of your standardized testing program.

Kind of Test	Name of Test(s)	Grade(s) in which given	Are Local Norms Available		Counselor or Guidance Dept. is respon. for: Select.		Adminis- tering		Scor- ing	
			Yes	No	Yes	No	Yes	No	Yes	No
IQ or general ability										
College aptitude										
Other special aptitude										
Achievement										
Interest										
Personality										
Other (Specify)										

B. Who does the actual scoring of tests? _____

24. How are any or all of the results of tests named in the previous question actually used by the counselor(s), teachers, and/or administration in your school? Check each statement that applies and briefly describe each use checked.

_____ A. To aid the teacher in providing for individual needs and abilities of students in the classroom.

_____ B. To aid in identifying students for special classes or sections.

_____ C. To aid students in selecting curricula (business, vocational, etc.)

_____ D. To provide comparative descriptive information about the school or individual classes.

_____ E. To provide the student with information about himself.

_____ F. To diagnose individual difficulties.

_____ G. To detect and/or help potential dropouts.

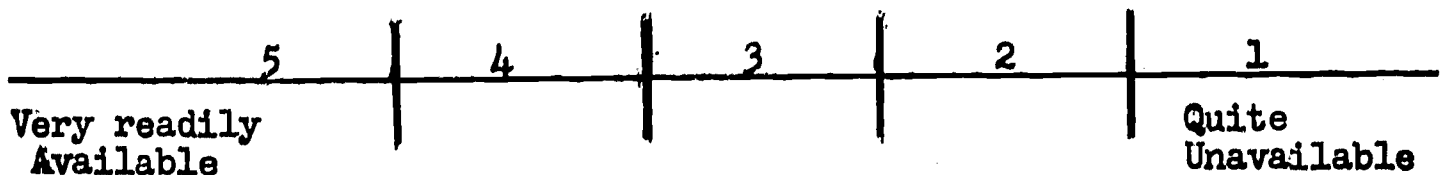
- ☐ H. To provide information to colleges, trade schools, etc., on individual students.
- ☐ I. To provide information on student for case conferences and/or consultation with teachers.
- ☐ J. To aid in counseling in other ways.
- ☐ K. Other uses _____

25. Rate the completeness of your educational-occupational information, using the scale below:

- 5. Outstanding
- 4. Fully adequate
- 3. Fairly adequate
- 2. Inadequate
- 1. Missing

- ☐ A. File of CURRENT unbound occupational and educational material.
- ☐ B. File of CURRENT college catalogues from colleges the students are likely to attend.
- ☐ C. File of CURRENT trade-business-technical school materials (including correspondence and/or night school courses).
- ☐ D. Material on scholastic aids (loans, scholarships, etc.)
- ☐ E. Material on draft obligations and military service.
- ☐ F. Bound materials (books, Occupational Outlook Handbook, etc.) on vocations.
- ☐ G. Information on LOCAL job and training opportunities and conditions.
- ☐ H. Material on public and/or private placement organizations.
- ☐ I. A collection of available library books (biography, etc.) related to occupational choice and careers.
- ☐ J. Guidance posters, displays, etc. to attract attention and invite reading.
- ☐ K. Other occupational materials (specify) _____

26. A. How available are your occupational-educational materials to students with respect to location, easy accessibility, and a filing system that makes it easy for the student to find what he needs? Check scale below.



- B. How, and at what level, are occupational materials used in class-room units, if at all?
- C. How, if at all, are resource persons used to provide information on occupations?
- D. How often, if at all, are field trips made for the purpose of gaining occupational information?

E. To what extent, if at all, are occupational audio-visual materials used? (specify briefly).

F. How often, if at all, are group discussions held on occupations and vocational planning? Are parents included? Yes____No____

G. Is there a career day/night? Yes____No____
Is there a college day/night? Yes____No____
Is there a military day/night? Yes____No____

H. Other uses of occupational materials (specify)_____

27. Rate the extent to which your school engages in the following educational-occupational placement activities, on the scale below:

- 3. We do this regularly as an ongoing activity
- 2. We do this occasionally
- 1. We don't do this

____A. Assisting pupils in securing part-time and/or summer employment.

____B. Assisting dropouts in securing further training.

____C. Assisting dropouts in obtaining employment.

____D. Assisting graduates in securing further education or training.

____E. Assisting graduates in obtaining employment.

____F. Utilizing results of surveys of work opportunities and informing students of results.

____G. Maintaining school-employer or school-agency relations for placement purposes.

____H. Recording information about student work experience in student's folder.

____I. Recording information on graduate's employment in student file.

____J. Use of other community resources. (Specify briefly).

____K. Other educational-vocational placement activities. (Specify briefly).

28. Followup Studies

A. Graduating seniors have been followed up. Yes____No____
If yes, how frequently?

B. Dropouts have been followed up. Yes____No____
If yes, how frequently?

C. If followup studies have been done, check below as appropriate to indicate how followup information has been used by the school:

____a. Gain information on curriculum and school organization.

____b. Make changes in curriculum or school organization.

____c. Acquaint community and staff with information on those who leave school.

____d. Gain information on success and adjustment of those who leave school.

____e. Identify dropouts who may need further help.

- _____f. Gain information on adequacy of guidance.
- _____g. Strengthen guidance (specify briefly).
- _____h. Other uses (specify briefly).
29. Using the following scale, rate the group guidance activities in which your school engages and briefly describe each activity in which you engage:
3. We do this regularly as an ongoing program
2. We do this occasionally
1. We do not do this
- _____A. Orientation activities
- _____B. Courses or units in educational-vocational planning (If an outline is available, please attach).
- _____C. Group sessions regarding college and vocational school requirements, applications, and other information. Are parents included? Yes _____ No _____
- _____D. Field trips
- _____E. Group counseling sessions (underachievers, personal problems, etc.)
- _____F. Group discussions on careers, college, etc. with outside speakers.
- _____G. Visits to "feeder schools" to acquaint pupils there with your school.
- _____H. Student group visits from "feeder schools" to this school.
- _____I. Group meetings with parents only to explain school program, etc.
- _____J. Group meetings with both students and parents.
- _____K. Other (specify).
30. Using the following scale, rate your guidance-oriented contacts with parents and briefly describe each one in which your school engages:
3. We do this regularly whenever it might be of value
2. We do this occasionally, but it would be of value to do more
1. We do not do this
- _____A. Telephone contacts with parent concerning student
- _____B. Home visits regarding student
- _____C. School visiting days where parents can discuss own child
- _____D. Individual parent-counselor conferences, scheduled by counselor at times convenient for parents to attend.
- _____E. Counseling with parents
- _____F. Provision of guidance-type information to parents at P.T.A.
- _____G. Other parent contacts (specify)

Project Number 095
Contract Number 5-85-035

STATE OF MINNESOTA
DEPARTMENT OF EDUCATION
CENTENNIAL OFFICE BUILDING
ST. PAUL 1, MINNESOTA

MINNESOTA GUIDANCE RESEARCH

Individual Counselor Questionnaire

This questionnaire is intended to be answered individually by each counselor and/or guidance worker assigned full or part time in this school. Feel free to write comments or explain or amplify your answers, using back of page as necessary. Where estimates of time are necessary, please make the most accurate estimate you can without spending excessive time in trying to calculate very exact percentages. Please KEEP THIS FORM in your possession until the field workers arrive; they will pick it up. The information will be kept in strictest confidence, and no comparisons will be made with others.

Name _____ Code No. _____

Name of School _____ School Code _____

- 1-2. At what college or university did you obtain your counselor training and endorsement?
- 3-4. What was your undergraduate teaching major? _____
- 5-6. You have the equivalent of how many full-time school years of teaching experience? (E.g., 3 years of half-time teaching would be 1½ yrs.) _____ years.
7. You have the equivalent of how many full-time school years of counseling experience? _____ years.
8. You have the equivalent of how many full-time school years of experience (teaching and/or counseling) in this school system? _____ years.
9. You have the equivalent of how many years (not school years) of work experience other than teaching or counseling? _____ years.
10. List below all of the professional guidance organizations to which you belong.
11. List below the professional journals to which you and/or the guidance department subscribe.
12. Please state briefly below (and on back as necessary), the objectives or goals of your guidance program in this school as you see them.
- 13-19. A. Please estimate the percent of your time that you typically spend in carrying out each of the following kinds of activities. If you are

NOT assigned to guidance full-time (for example, if you teach some class) please take the time you are assigned to guidance as 100%, and estimate the percent of this assigned guidance time that you spend on each kind of activity.

- a. Actually counseling with one or more students
- b. Other guidance functions
- c. Non-guidance functions

TOTAL 100% of assigned guidance time

B. Please list the actual non-guidance duties you perform on your assigned guidance time.

20. Are you assigned to work with:

- A. Any student who wishes to see you
- B. With one grade only (Which grade?)
- C. One class as it progresses through school
- D. A portion of each class as it progresses through school
- E. Other (specify)

Considering the total time you spend in actual personal contacts with students as 100%, estimate the percent of this time spent in each of the next six categories.

21-22. providing information regarding colleges, trade or vocational schools, military training, scores on routinely given tests, etc.

23-24. talking with students about orientation to the school, registration, individual course changes during the year.

25-26. conferring with students about next year's course choices.

27-28. seeing students referred because of violation of school rules, misbehavior or dismissal from class for some reason.

29-30. career planning; possibly including test interpretation, course choices over several years, post high school plans, vocational decisions, etc.

31-32. working with students having personal-social problems, self-doubts, and the like (apart from problems referred to in 27-28 above).
 other (specify)

TOTAL 100% of time spent in personal contacts

Similarly estimate the percent of time spent with each category of student below:

32-33. students scheduled by you

34-35. students referred by teachers, administration, and others

36-37. self-referred (students who come in of their own accord)

TOTAL 100% of time spent with students

Project Number 095
Contract Number 5-85-035

STATE OF MINNESOTA
DEPARTMENT OF EDUCATION
CENTENNIAL OFFICE BUILDING
ST. PAUL 1, MINNESOTA

MINNESOTA GUIDANCE RESEARCH

Teacher Questionnaire

Your school was selected at random as one of 85 Minnesota schools to participate in a pioneering attempt to assess guidance in Minnesota, and your name was selected randomly from a roster of teachers at this school. Your cooperation in taking a few minutes of your time to fill out this questionnaire will add much to the value of the study.

The information you provide will be held in complete confidence; NO ONE but the research team will know how you responded. There will be no comparison of schools or people; the purpose of the study is to find out what is going on in guidance through the sampling process. It is very important that you be as frank and as accurate as possible in your responses.

Feel free to add any comments you wish, using the back of the form if you need more space. Please give the form directly to the field worker at your school, who will talk with you about the form and try to answer any questions or clarify any points that are not clear to you. Thank you for your help.

Male_____Female_____Your Undergraduate Major_____Code_____

Name of School_____Code_____

Subjects you teach include:_____

Are you a member of a guidance committee in your school? Yes_____No_____

1-2. Based on your observations and experience, how helpful has the counselor and/or the guidance program of your school been in each of the following areas? (Check the column that best describes how helpful you feel the guidance program has been in each area.)

	<u>Very Helpful</u>	<u>Somewhat Helpful</u>	<u>Of Little or No Help</u>	<u>Do Not Know</u>
A. Helps me interpret test scores in such a way as to enable me to do better teaching or help students	_____	_____	_____	_____
B. Helps me to assist students by providing information on:				
(1) gifted students	_____	_____	_____	_____
(2) physically handicapped students	_____	_____	_____	_____
(3) students with emotional problems	_____	_____	_____	_____
(4) students with home problems	_____	_____	_____	_____
(5) apparently unmotivated (underachieving) students	_____	_____	_____	_____
(6) other students (specify)	_____	_____	_____	_____
_____	_____	_____	_____	_____
C. Helps me to understand aspects of normal growth and development through programs, conferences, personal contacts, etc.	_____	_____	_____	_____
D. Offers suggestions and ideas to me in coping with students who have behavior problems.	_____	_____	_____	_____
E. Places information that is of value to me into student folders.	_____	_____	_____	_____
F. Provides a resource for the referral of students whom I cannot help.	_____	_____	_____	_____
G. Helps plan students' programs (course selection).	_____	_____	_____	_____
H. Helps students learn the skills of getting along with others.	_____	_____	_____	_____
I. Helps parents understand their children's problems.	_____	_____	_____	_____
J. Other ways in which the guidance program is helpful (please specify).	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
3. In general, how well do you feel your present guidance program is meeting the needs of your students? Consider not only the counseling and other work done by the counselor(s), but all other aspects of guidance as carried on in your school. Place a check mark on the scale below at the point you feel most accurately represents the extent of your satisfaction with your present guidance program and services.				

A check at point "1" would indicate that you are completely dissatisfied, and feel that the guidance program is doing little or nothing to meet the needs of your students or that there is no guidance program. A check at point "9" would indicate that you are completely satisfied that the program is fully adequate in meeting the needs of your students.

1	2	3	4	5	6	7	8	9
Completely Dissatisfied					Completely Satisfied			

4-5. To what extent do you personally perform guidance-related functions in your school? For each of the functions listed below, check in the column that best describes the extent to which you do these things either in classes or in other contacts with students. Please feel free to add other ways in which you perform guidance functions.

Meaning of terms: Frequently: regularly with each new group of students if a class-type activity; if not, then as an on-going thing with many students.

Occasionally: class activity carried on now and then but not with each new class; other activity now and then but not regularly.

	<u>Frequently</u>	<u>Occasionally</u>	<u>Never</u>
A. Talk with my students about careers in my subject matter area.	_____	_____	_____
B. Give students information about college and/or vocational schools in my subject area.	_____	_____	_____
C. Encourage students who show career interest in my area to study occupational materials.	_____	_____	_____
D. Help administer the standardized tests we give.	_____	_____	_____
E. Use test results to plan or modify my teaching.	_____	_____	_____
F. Encourage students to explore their ideas and concerns about dating, marriage, social relationships.	_____	_____	_____
G. Explore with students the opportunities for satisfying the use of leisure time.	_____	_____	_____
H. Use information available in the school about individual students in making individualized assignments.	_____	_____	_____

	<u>Frequently</u>	<u>Occasionally</u>	<u>Never</u>
I. Provide personal information on students (anecdotes, observations) for the cumulative folder or file.	_____	_____	_____
J. Attend teachers' meetings which take up matters pertaining to guidance, (e.g. adolescent problems, etc.)	_____	_____	_____
K. Talk with parents about their child who needs help, encouragement, understanding, etc.	_____	_____	_____
L. Draw attention of other staff members and/or the administration to students who have special talents.	_____	_____	_____
M. Refer students who need assistance to the counselor or some other specialist.	_____	_____	_____
N. Participate in case conferences with counselor and/or the others concerning students with problems.	_____	_____	_____
O. Draw attention of staff members and/or administration to students who evidence special problems or handicaps.	_____	_____	_____
P. Assist individual students in school programming, course selection, and other school problems.	_____	_____	_____
Q. Talk with students about their educational and/or vocational plans.	_____	_____	_____
R. Work with individual students who have personal problems.	_____	_____	_____
S. Help students work toward the more personal or "inner" goals such as gaining self-confidence, clarifying values, improving self-respect, etc.	_____	_____	_____
T. Deliberately develop a class atmosphere in which students freely express and discuss ideas even when I don't agree with their ideas.	_____	_____	_____
U. Other guidance functions I perform (please specify)	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Project Number 095
Contract Number 5-85-035

STATE OF MINNESOTA
DEPARTMENT OF EDUCATION
CENTENNIAL OFFICE BUILDING
ST. PAUL 1, MINNESOTA

MINNESOTA GUIDANCE RESEARCH

Student Questionnaire

School _____ Code _____

Male _____ Female _____ Date of Birth _____ Code _____
Month Day Year

Course or Curriculum in High School (general, college preparatory, business, agriculture, etc.) _____

Your school has been selected as one of a sample of Minnesota schools to be part of a study of guidance. The aim of this study is to try to find out how much and in what ways students have been helped by school guidance; this information will help schools to give better guidance to future students.

Within each school, a random sample of students has been selected, and your name was one of those drawn. With your help this study can be of real value to future students. Your answers to the questions in this form will be known to NO ONE except the visiting research team. It is important that you be as frank and accurate as you can in answering the questions. Later, you will have an opportunity to ask questions about any part of this form that is not clear to you, or explain any point further if you wish. Feel free to make any comments you wish on the form, using the back if you need more space. Please answer all the questions. Thank you for your cooperation.

1. Occupation of chief wage-earner (father or the person who brings in most of the family income). Please name or describe the job or occupation as exactly as possible here _____

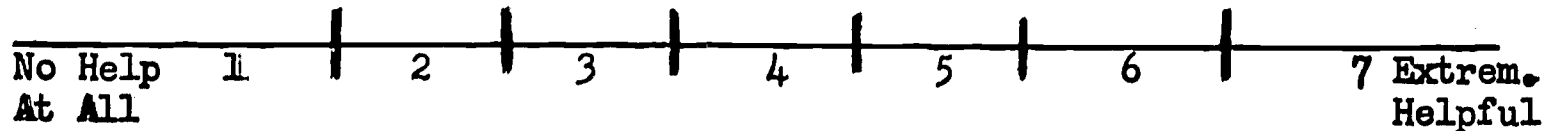
If you cannot give the title or description, check the group below that is most like the work done by the wage-earner.

- _____ A. Office work (bookkeeper, cashier, postal clerk, secretary, paymaster, bill collector, stenographer, telegraph operator, stock clerk, business-machine operator, hotel clerk, etc.)
_____ B. Owner or manager, farm.
_____ C. Factory worker (machine operator, farm worker, timber cutter, saw operator, butter packer, meat curer, mine worker, janitor, road laborer, etc.)
_____ D. Profession (lawyer, doctor, engineer, C.P.A., teacher, minister, dentist, chemist, county agent, pharmacist, etc.)

- ☐ E. Sales (real estate, insurance, retail store, farm implement, auctioneer, etc.)
 - ☐ F. Service occupation (postman, fireman, policeman, barber, beautician, military service, bartender, etc.)
 - ☐ G. Skilled trade (millwright, machinist, carpenter, shop foreman, bricklayer, auto mechanic, electrician, etc.)
 - ☐ H. Owner or manager, business (store, gas station, garage, insurance agency, hotel repair shop; credit manager, building manager, etc.)
 - ☐ I. No usual or regular employment
 - ☐ J. Other occupation that does not fit above (Please give name) _____
2. Education of father: (Check highest level attained)
- ☐ A. Did not attend school
 - ☐ B. Some grade school
 - ☐ C. Completed eighth grade
 - ☐ D. Some high school
 - ☐ E. Graduated from high school
 - ☐ F. Business or trade school
 - ☐ G. Some college work
 - ☐ H. Graduated from college
 - ☐ I. Holds more than one college degree
3. Education of mother: Same as No. 2 above (father).
4. Check the phrase that best describes your family income:
- ☐ A. Always short of the necessities
 - ☐ B. Often have difficulty making ends meet
 - ☐ C. Sometimes have difficulty getting the necessities
 - ☐ D. Have most necessities but almost no luxuries
 - ☐ E. Comfortable; have a few luxuries
 - ☐ F. Quite well-to-do; have most things we really want
 - ☐ G. Well-to-do; have practically all we want
 - ☐ H. Wealthy
5. Approximately how many books does your family have?
- ☐ A. Almost none (0-10)
 - ☐ B. A few books (11-25)
 - ☐ C. About one bookcase full (26-100)
 - ☐ D. About two bookcases full (101-250)
 - ☐ E. About three to four bookcases full (251-500)
 - ☐ F. A room or library full (over 500)
6. What would your parents most like to see you do after you graduate?
(If meeting military obligations comes first, what would they like to see you do later?)
- ☐ A. Go to college
 - ☐ B. Go to trade or technical school
 - ☐ C. Enter a military career
 - ☐ D. Get a job (or do farming if this applies)
 - ☐ E. Never let me know what they wanted
 - ☐ F. Get married (girls only, please!)
 - ☐ G. Other (please specify what) _____

7. What are most of your close friends planning to do after graduation?
(aside from fulfilling military obligations)
- ☐ A. Go to college
 - ☐ B. Go to trade or technical school
 - ☐ C. Enter a military career
 - ☐ D. Get a job (or do farming if this applies)
 - ☐ E. Get married
 - ☐ F. Most have no plans after high school
 - ☐ G. Other (please explain) _____
8. If you should have the good fortune to be able to realize your greatest ambitions, what would you become, or what career or occupation would you follow?
9. Considering the practical problems and facts of life, what do you actually think you will become, or what career or occupation do you think you will enter?
10. If you have a problem in trying to decide on a career or area of study for a vocation, to whom would you be most likely to go to get help on this problem? (This person could be someone in school or someone outside of school. Please indicate title or relationship to you, rather than name.) _____
11. If you had a problem relating to school (classes, teachers, etc.) to whom would you most likely go to get help on this problem? (Again, give title or relationship to you.) _____
12. If you have a personal problem that was of real concern to you, to whom would you be most likely to go to discuss the problem and seek help, (or whom did you go to see if you did have such a problem). (Again, give title or relationship to you.) _____
13. Is there at least one counselor in your school? Yes ___ No ___
14. If not, is there someone in the school whose job it is to do counseling, at least part time? Yes ___ No ___
If there is no one in your school who serves as a counselor, skip questions 15-22 and go on to 23. If there was someone, answer 15, 16, and 17.
15. If given the choice, would you prefer to go and see a counselor of your own sex about personal, educational, or vocational problems? Yes ___ No ___
Makes no difference to me _____
16. Do you actually have a choice of counselors, or is one assigned to you?
Have a choice ___ One assigned to me ___ Only one counselor in school ___
17. Have you ever been to see a school counselor? Yes ___ No ___ (If "no" skip items 18-21 and go on to 22. If "yes" answer 18-21 also.)
18. If "yes" to the above, please try to remember as exactly as you can how many times you visited with a counselor in:
- 1. tenth grade _____
 - 2. eleventh grade _____
 - 3. this year _____
19. Please estimate as closely as you can how long these visits were, usually or on the average. _____ minutes.
20. For what reason (or reasons) did you see the counselor?

21. Was it of help to you to see the counselor? Please tell just how it was helpful, or the kinds of help you were given, if any.
22. Please check on the scale below how helpful you feel the counselor has been to you in any way, whether or not you have had private conferences with him. A check at "1" would mean you really have not received any help at all from him; a check at "7" would mean he has been extremely helpful.



23. The items below tell of some ways in which students might be helped by someone on the school staff (counselor, principal, teacher, coach, etc.) Put a check (✓) in the parentheses at the left for only those items that tell how students in your school actually have been helped by someone on the staff.

After each check mark you have made, write in the title of the person in your school who was helpful (social science teacher, debate coach, counselor, etc.)

- A. () _____ Gives or helps students get information about colleges.
- B. () _____ Gives or helps students get information about trade or vocational schools or military training.
- C. () _____ Explains test scores to students.
- D. () _____ Helps students get information about jobs in the community.
- E. () _____ Helps students get to know or get oriented to the school.
- F. () _____ Helps students decide on and make changes in subjects.
- G. () _____ Helps students plan their total high school programs.
- H. () _____ Helps students to better understand their own abilities interests, and aptitudes.
- I. () _____ Helps students develop better study skills.
- J. () _____ Works with students trying to decide on a school or college to attend.
- K. () _____ Helps students find part-time or summer jobs.
- L. () _____ Helps graduating seniors find jobs.
- M. () _____ Helps students who are dropping out find jobs.
- N. () _____ Works with students who have personal or social concerns such as feeling left out, shyness, nervousness, trouble with the family, etc.
- O. () _____ Helps students who are in trouble in school.
- P. () _____ Works with students in trying to decide on a career.
- Q. () _____ Helps students by having visits with their parents.
- R. () _____ Helps handicapped students.

- S. () _____ Helps students make the most of special talents or abilities.
- T. () _____ Helps students in other ways (please tell how) _____

24. In what school extra-curricular activities have you participated?

- | <u>Check Category</u> | <u>Please name the specific activity or activities</u> |
|-----------------------------------|--|
| <u>A. School publications</u> | _____ |
| <u>B. Athletics</u> | _____ |
| <u>C. Music</u> | _____ |
| <u>D. Debate, Theater, Speech</u> | _____ |
| <u>E. Clubs</u> | _____ |
| <u>F. Other activities</u> | _____ |

25. The statements below tell about some ways that students might feel about their counselor. Please "score" each statement to show how you feel about your counselor. IF YOU SIMPLY CANNOT MARK THE STATEMENTS because you do not know your counselor, leave blank and go to no. 26. Mark each statement on the following scale:

Mark 5-If the statement is very true (you feel strongly that it is true)

Mark 4-If the statement is probably true

Mark 3-If you just cannot say about this (use as little as poss.)

Mark 2-If the statement is probably not true

Mark 1-If the statement is definitely not true

- _____ 1. He or she respects me (The rest will all use "he", no matter if the person is a woman)
- _____ 2. He tries to see things the way I do and understands how I feel.
- _____ 3. He pretends to like or understand me more than he really does.
- _____ 4. His interest in me depends on what I am talking about.
- _____ 5. He doesn't seem to like me very much.
- _____ 6. He tells his opinions more than I want to know them..
- _____ 7. He is curious about "the way I tick" but not really interested in me as a person.
- _____ 8. He is interested in knowing how I look at things.
- _____ 9. It seems to bother him when I talk or ask about certain things.
- _____ 10. His feeling toward me depends on how I feel toward him.
- _____ 11. He likes seeing me.
- _____ 12. At times he seems to jump to the conclusion that I feel more strongly about something than I actually do.
- _____ 13. It is hard for me to know what he is really like as a person.
- _____ 14. He is friendly and warm toward me.
- _____ 15. He understands me.
- _____ 16. I feel that I can trust him to level with me.
- _____ 17. Sometimes he is warm and friendly; sometimes not so friendly.

- _____ 18. He just tolerates or "puts up" with me.
- _____ 19. He does not realize how strongly I feel about some of the things we discuss.
- _____ 20. There are times when I think that what he says does not show what he really feels.
- _____ 21. He hurries me through my business with him.
- _____ 22. How I feel about myself makes no difference in the way he feels about me.
- _____ 23. I often feel that he has more important things to do when I am talking to him.
- _____ 24. At times he seems impatient with me.
- _____ 25. He usually understands all of what I say to him.
- _____ 26. He seems to regard me as an agreeable person.
- _____ 27. Even when I can't say what I mean clearly, he still seems to understand me.
- _____ 28. He tries to avoid telling me anything that might upset me.
- _____ 29. It seems that things (like the phone) often interrupt us when we're talking.

26. IF you were unable to answer the statements above about your counselor, could you have answered them about someone else on the school staff, because you do know that other person well enough? Yes___No___. If "yes", please write down the TITLE (not name) of the person about whom you could have answered. _____

Project Number 095
Contract Number 5-85-035

STATE OF MINNESOTA
DEPARTMENT OF EDUCATION
CENTENNIAL OFFICE BUILDING
ST. PAUL 1, MINNESOTA
MINNESOTA GUIDANCE RESEARCH

What Your School Is Like

Student Code _____
School Code _____

Below is a list of true-false statements about high schools--characteristics of teachers, activities of students, etc. You are to decide which statements are generally true about your school and which are not. Your answers should tell how things really are at this school, not how you would like them to be. If, in your opinion, the statement is true or mostly true about your school, check on the line after T_. If the statement is false or mostly false, check on the line after F_. PLEASE DO NOT OMIT ANY ITEMS.

- | | |
|--|--------|
| 1. It is difficult to take clear and usable notes in most classes here. | T__F__ |
| 2. Teachers clearly explain what students can get out of their classes and why it is important. | T__F__ |
| 3. Many classes here are boring. | T__F__ |
| 4. Students here value individualism; that is, being different from others. | T__F__ |
| 5. Most students here dress and act pretty much alike. | T__F__ |
| 6. Science labs here have poor equipment. | T__F__ |
| 7. Science teachers here expect and get more work out of students than do other teachers. | T__F__ |
| 8. The guidance counselors here most often recommend majoring in science in college | T__F__ |
| 9. The teachers here encourage the students to take as many science courses as possible. | T__F__ |
| 10. Many students here want to take more courses in science than are required. | T__F__ |
| 11. Many students here are planning careers in science. | T__F__ |
| 12. There is not much interest in science clubs among students here. | T__F__ |
| 13. Students here tend to like science courses more than other courses. | T__F__ |
| 14. Many teachers here stress the practical uses of their subjects in helping students to get a good job. | T__F__ |
| 15. Many teachers here are more interested in practical application of what they are teaching than in the underlying theory. | T__F__ |
| 16. Students seldom get together on their own time to talk about things they have learned in class. | T__F__ |
| 17. There is a lot of interest here in learning for its own sake, rather than just for grades or for graduation credits. | T__F__ |
| 18. Most students here don't do much reading. | T__F__ |
| 19. There is a lot of competition for grades here. | T__F__ |
| 20. A lot of students here are content just to get by. | T__F__ |

21. Students here are very much aware of the competition to get into college. T__F__
22. Few students try hard to get on the honor roll. T__F__
23. Clear and careful thinking are most important in getting a good grade on reports, papers, discussions, and tests. T__F__
24. Teachers do nothing more than repeat what's in the textbook in many classes here. T__F__
25. Teachers here encourage students to value knowledge for its own sake, rather than just for grades. T__F__
26. There is not much emphasis by teachers here on preparing for college. T__F__
27. It takes more than memorizing what's in the textbook to get an "A" in courses here. T__F__
28. Teachers here are really skillful at getting students to work to the limit of their ability. T__F__
29. Personality, pull, and bluff get students through some courses here. T__F__
30. Students having trouble with their courses find it difficult to get help from teachers. T__F__
31. Teachers here often make cutting or sarcastic remarks to students in class. T__F__
32. Outside of class most teachers find time to chat with students. T__F__
33. The teachers here really talk with the students, not just at them. T__F__
34. If a student thinks out a report carefully teachers will give him a good grade, even if they don't agree with him. T__F__
35. At this school students are seldom encouraged to undertake independent projects. T__F__
36. Some of the teachers treat questions in class as if the students were criticising them personally. T__F__
37. In this school teachers do not adjust assignments and projects to the individual student's interests. T__F__
38. Classes in history, literature, and art are among the best liked here. T__F__
39. Very few students here ever listen to classical music. T__F__
40. A student who is interested in art or music is likely to be regarded as a little odd by other students. T__F__
41. Very few students here would be interested in a field trip to an art museum. T__F__
42. This school doesn't offer many opportunities for students to get to know important works of art, music and drama. T__F__
43. Students here are not encouraged to take courses in such areas as art, music, or dramatics. T__F__
44. Teachers here go out of their way to try to liberate the student from his prejudices and biases. T__F__
45. Student discussions on national and international news are encouraged in class. T__F__
46. Teachers frequently urge students to consider the influence of history on current events. T__F__

Project Number 095
Contract Number 5-85-035

STATE OF MINNESOTA
DEPARTMENT OF EDUCATION
CENTENNIAL OFFICE BUILDING
ST. PAUL 1, MINNESOTA
GUIDANCE RESEARCH PROJECT

Adjective Scale

Code No. _____

There is value for each of us in looking at ourselves as we are and as we would like to be, but we seldom have the opportunity to do so. This device is a way of helping you to state some of your beliefs about the kind of person you are. It tells nothing more than what you want it to say--there are no hidden scores or tricks. It will have value only if you are careful and do your best to give as accurate answers as possible. NO ONE but the research team will see your answers, and they will simply add up the score and record it. Your answers will never be associated with you, but honest answers will help us to find out more about guidance in Minnesota.

Starting on the next page is a list of 49 words that are often used to describe people. Take each word separately and think of it as fitting into the blank in the following sentence:

"I am a _____ person." For instance, if the word were "happy", the sentence would read, "I am a happy person."

Then decide HOW MUCH OF THE TIME you are this kind of a person, and indicate this by putting a check mark (✓) in one of the left-hand columns marked 1-5, using the following key:

1. SELDOM am I this kind of person
2. OCCASIONALLY I am this kind of person
3. ABOUT HALF THE TIME I am this kind of person
4. A GOOD DEAL OF THE TIME I am this kind of person
5. MOST OF THE TIME I am this kind of person

After you have checked all 49 words to indicate the kind of person you feel you are in these ways, go back and check off the right side of the page to tell HOW YOU FEEL ABOUT BEING THE WAY YOU ARE. Again, put a check mark in one of the columns, using the following key:

1. I VERY MUCH DISLIKE being the way I am about this
2. I DISLIKE being as I am about this
3. I NEITHER LIKE OR DISLIKE being as I am about this
4. I LIKE being as I am about this
5. I LIKE VERY MUCH being as I am about this

For example, suppose that on the left side of the page you marked "2" for the word "acceptable", meaning you are occasionally like this, if

you dislike being this way, you would also mark "2" on the right-hand side of the page.

PART I

I am like this:

1. Seldom
2. Occasionally
3. About Half The Time
4. A Good Deal Of The Time
5. Most Of The Time

PART II

How I feel about being this way:

1. Very Much Dislike
2. Dislike
3. Neither Like or Dislike
4. Like
5. Like Very Much

	1	2	3	4	5		1	2	3	4	5
1. acceptable	—	—	—	—	—	1. acceptable	—	—	—	—	—
2. accurate	—	—	—	—	—	2. accurate	—	—	—	—	—
3. alert	—	—	—	—	—	3. alert	—	—	—	—	—
4. ambitious	—	—	—	—	—	4. ambitious	—	—	—	—	—
5. annoying	—	—	—	—	—	5. annoying	—	—	—	—	—
6. busy	—	—	—	—	—	6. busy	—	—	—	—	—
7. calm	—	—	—	—	—	7. calm	—	—	—	—	—
8. charming	—	—	—	—	—	8. charming	—	—	—	—	—
9. clever	—	—	—	—	—	9. clever	—	—	—	—	—
10. competent	—	—	—	—	—	10. competent	—	—	—	—	—
11. confident	—	—	—	—	—	11. confident	—	—	—	—	—
12. considerate	—	—	—	—	—	12. considerate	—	—	—	—	—
13. cruel	—	—	—	—	—	13. cruel	—	—	—	—	—
14. democratic	—	—	—	—	—	14. democratic	—	—	—	—	—
15. dependable	—	—	—	—	—	15. dependable	—	—	—	—	—
16. economical	—	—	—	—	—	16. economical	—	—	—	—	—
17. efficient	—	—	—	—	—	17. efficient	—	—	—	—	—
18. fearful	—	—	—	—	—	18. fearful	—	—	—	—	—
19. friendly	—	—	—	—	—	19. friendly	—	—	—	—	—
20. fashionable	—	—	—	—	—	20. fashionable	—	—	—	—	—
21. helpful	—	—	—	—	—	21. helpful	—	—	—	—	—
22. intellectual	—	—	—	—	—	22. intellectual	—	—	—	—	—
23. kind	—	—	—	—	—	23. kind	—	—	—	—	—
24. logical	—	—	—	—	—	24. logical	—	—	—	—	—
25. meddlesome	—	—	—	—	—	25. meddlesome	—	—	—	—	—
26. merry	—	—	—	—	—	26. merry	—	—	—	—	—
27. mature	—	—	—	—	—	27. mature	—	—	—	—	—
28. nervous	—	—	—	—	—	28. nervous	—	—	—	—	—
29. normal	—	—	—	—	—	29. normal	—	—	—	—	—
30. optimistic	—	—	—	—	—	30. optimistic	—	—	—	—	—
31. poised	—	—	—	—	—	31. poised	—	—	—	—	—
32. purposeful	—	—	—	—	—	32. purposeful	—	—	—	—	—
33. reasonable	—	—	—	—	—	33. reasonable	—	—	—	—	—
34. reckless	—	—	—	—	—	34. reckless	—	—	—	—	—
35. responsible	—	—	—	—	—	35. responsible	—	—	—	—	—
36. sarcastic	—	—	—	—	—	36. sarcastic	—	—	—	—	—

	1	2	3	4	5		1	2	3	4	5
37. sincere	—	—	—	—	—	37. sincere	—	—	—	—	—
38. stable	—	—	—	—	—	38. stable	—	—	—	—	—
39. studious	—	—	—	—	—	39. studious	—	—	—	—	—
40. successful	—	—	—	—	—	40. successful	—	—	—	—	—
41. stubborn	—	—	—	—	—	41. stubborn	—	—	—	—	—
42. tactful	—	—	—	—	—	42. tactful	—	—	—	—	—
43. teachable	—	—	—	—	—	43. teachable	—	—	—	—	—
44. useful	—	—	—	—	—	44. useful	—	—	—	—	—
45. worthy	—	—	—	—	—	45. worthy	—	—	—	—	—
46. broad-minded	—	—	—	—	—	46. broad-minded	—	—	—	—	—
47. businesslike	—	—	—	—	—	47. businesslike	—	—	—	—	—
48. competitive	—	—	—	—	—	48. competitive	—	—	—	—	—
49. fault-finding	—	—	—	—	—	49. fault-finding	—	—	—	—	—

Project Number 095
Contract Number 5-85-035

STATE OF MINNESOTA
DEPARTMENT OF EDUCATION
CENTENNIAL OFFICE BUILDING
ST. PAUL 1, MINNESOTA

MINNESOTA GUIDANCE RESEARCH

Academic Self-Estimate

Student Code _____

Check in front of the statement that best answers each question.

1. How do you rate yourself in school ability compared with your close friends?

- | | |
|-----------------------------|-----------------------------|
| _____ 1. I am the poorest | _____ 4. I am above average |
| _____ 2. I am below average | _____ 5. I am the best |
| _____ 3. I am average | |

2. How do you rate yourself in school ability compared with those in your class at school?

- | | |
|---------------------------------|------------------------------|
| _____ 1. I am among the poorest | _____ 4. I am above average |
| _____ 2. I am below average | _____ 5. I am among the best |
| _____ 3. I am average | |

3. Where do you think you will rank in your high school graduating class?

- | | |
|----------------------------|-------------------------|
| _____ 1. Among the poorest | _____ 4. Above average |
| _____ 2. Below average | _____ 5. Among the best |
| _____ 3. Average | |

4. Do you think you have the ability to complete college?

- | | |
|------------------------------|--------------------------|
| _____ 1. No | _____ 4. Yes, probably |
| _____ 2. Probably not | _____ 5. Yes, definitely |
| _____ 3. Not sure either way | |

5. Where do you think you would rank in your class in college?

- | | |
|----------------------------|-------------------------|
| _____ 1. Among the poorest | _____ 4. Above average |
| _____ 2. Below average | _____ 5. Among the best |
| _____ 3. Average | |

6. In order to become a doctor, lawyer, or university professor, work beyond four years of college is necessary. How likely do you think it is that you could complete such advanced work?

- ☐ 1. Most unlikely
 ☐ 4. Somewhat likely
☐ 2. Unlikely
 ☐ 5. Very likely
☐ 3. Not sure either way
7. Forget for a moment how others grade your work. In your own opinion, how good do you think your work is?
- ☐ 1. Much below average
 ☐ 4. Good
☐ 2. Below average
 ☐ 5. Excellent
☐ 3. Average
8. What kind of grades do you think you are capable of getting?
- ☐ 1. Mostly F's
 ☐ 4. Mostly B's
☐ 2. Mostly D's
 ☐ 5. Mostly A's
☐ 3. Mostly C's
9. How important to you are the grades you get in school?
- ☐ 1. Grades don't matter to me at all
☐ 2. Not particularly important
☐ 3. Important
☐ 4. Very important
10. How important is it to you to be high in your class in grades?
- ☐ 1. Doesn't matter to me at all
☐ 2. Not particularly important
☐ 3. Important
☐ 4. Very important
11. How do you feel if you don't do as well in school as you know you can?
- ☐ 1. Doesn't bother me at all
☐ 2. Don't feel particularly badly
☐ 3. Feel badly
☐ 4. Feel very badly
12. How important is it to you to do better than others in school?
- ☐ 1. Doesn't matter to me at all
☐ 2. Not particularly important
☐ 3. Important
☐ 4. Very important
13. Which statement best describes you?
- ☐ 1. I don't care about any particular grades.
☐ 2. I like to get about the same grades as everyone else.
☐ 3. I like to get better grades than almost everyone else.
☐ 4. I like to get better grades than everyone else.
14. In your schoolwork, do you try to do better than others?
- ☐ 1. Never
☐ 2. Occasionally
☐ 3. Most of the time
☐ 4. All of the time
15. How important to you are good grades compared with other aspects of school?
- ☐ 1. Good grades don't matter to me at all.
☐ 2. Some other things in school are more important.
☐ 3. Good grades are among the important things in school.
☐ 4. Good grades are the most important thing in school.

Published Instruments Used In Survey

In addition to the instruments to be found in this appendix, each student in the sample was administered two standardized tests, and each had earlier taken two other standardized tests as part of the Minnesota Statewide Testing Program. Scores on the latter two tests were obtained for each student.

These four tests and the sources for both the tests and for norms and other test data are as follows:

A. Tests administered as part of the survey

1. Iowa Tests of Educational Development, Test #5, Form Y-3S, Interpretation--Social Studies.
2. Army General Classification Test, First Civilian Edition, Form AM.

Both tests from: Science Research Associates
259 East Erie Street
Chicago, Illinois 60611

3. Vocational Development Inventory. Research editions of this inventory are available from Dr. John O. Crites, Director, University Counseling Service, State University of Iowa, Iowa City, Iowa. The form used in this study is published in the following publication:

Crites, John O. "Measures of Vocational Maturity in Adolescents: 1. Attitude Test of the Vocational Development Inventory," Psychological Monographs, No. 595, Vol. 79, No. 2, 1965, 33pp.

B. Tests given earlier as part of Statewide Testing Program

1. Minnesota Scholastic Aptitude Test
2. Minnesota English Test

Both tests from: Minnesota Statewide Testing Service
Student Counseling Bureau
University of Minnesota
Minneapolis, Minnesota 55455

_____ from _____
in _____ High School reports that he/she is attending
_____. This student's progress
is best described as follows: (check appropriate box)

- ☐ Outstanding
- ☐ Satisfactory
- ☐ Borderline (on probation or equivalent)
- ☐ Failing (or dropped for lack of progress)
- ☐ Left the course for other reasons; progress satisfactory
- ☐ Transcript enclosed (IF YOU PREFER)

Name _____ School Code _____

As a part of a study of guidance programs in Minnesota high schools, we are collecting information on the post-high school plans of a sample of students. Would you please indicate your plans for next year by checking the line below that best describes what you plan to do. Thank you for your help.

___ I plan to go to college. Indicate name of college if you know.

___ I plan to go to a trade or vocational school (including such schools as business, secretarial, skilled trades, drafting, barbering, beauty school, etc.) Please name the school if you know. _____

___ I plan to go to a nursing school other than a college. What institution?

___ I plan to get a job.

___ I plan to enter military service.

___ I have other plans: (Please indicate briefly) _____

Project Number 095
Contract Number 5-85-035

STATE OF MINNESOTA
DEPARTMENT OF EDUCATION
CENTENNIAL OFFICE BUILDING
ST. PAUL 1, MINNESOTA

MINNESOTA GUIDANCE RESEARCH

Former Student Questionnaire

Student Code _____
School _____ School Code _____
Male _____ Female _____ Single _____ Married _____ Other _____ No. Children _____

Course or Curriculum you followed in High School (general, college preparatory, business, agriculture, some combination such as college preparatory and business, etc.) _____

We have tried to word the items as clearly as possible, but if you still have some question about any of them, please explain on the form what the problem is. Feel free to make any other comments you wish.

The first few questions are about matters other than guidance, since guidance is only one of the things that affect a student's life.

1. Occupation of chief wage-earner (father or the person who brings in most of the family income). Please name or describe the job or occupation as exactly as possible here _____

If you cannot give the title or description, check the group below that is most like the work done by the wage-earner.

- ___ A. Office work (bookkeeper, cashier, postal clerk, secretary, paymaster, bill collector, stenographer, telegraph operator, stock clerk, business-machine operator, hotel clerk, etc.)
- ___ B. Owner or manager, farm.
- ___ C. Factory worker (machine operator, farm worker, timber cutter, saw operator, butter packer, meat curer, mine worker, janitor, road laborer, etc.)
- ___ D. Profession (lawyer, doctor, engineer, C.P.A., teacher, minister, dentist, chemist, county agent, pharmacist, etc.)
- ___ E. Sales (real estate, insurance, retail store, farm implements, auctioneer, etc.)
- ___ F. Service occupation (postman, fireman, policeman, barber, beautician, military service, bartender, etc.)
- ___ G. Skilled trade (millwright, machinist, carpenter, shop foreman, bricklayer, auto mechanic, electrician, etc.)
- ___ H. Owner or manager, business (store, gas station, garage, insurance agency, hotel, repair shop; credit manager, building manager, etc.)
- ___ I. No usual or regular employment
- ___ J. Other occupation that does not fit above (Please give name) _____

Are you the wage-earner referred to above? Yes _____ No _____

2. Education of father: (Check highest level attained)
- | | |
|--|--|
| <input type="checkbox"/> A. Did not attend school | <input type="checkbox"/> F. Bus. or trade school |
| <input type="checkbox"/> B. Some grade school | <input type="checkbox"/> G. Some college work |
| <input type="checkbox"/> C. Completed eighth grade | <input type="checkbox"/> H. Graduated from college |
| <input type="checkbox"/> D. Some high school | <input type="checkbox"/> I. Holds more than one college degree |
| <input type="checkbox"/> E. Graduated from high sch. | |
3. Education of mother: (Check highest level attained)
- | | |
|--|--|
| <input type="checkbox"/> A. Did not attend school | <input type="checkbox"/> F. Bus. or trade school |
| <input type="checkbox"/> B. Some grade school | <input type="checkbox"/> G. Some college work |
| <input type="checkbox"/> C. Completed eighth grade | <input type="checkbox"/> H. Graduated from college |
| <input type="checkbox"/> D. Some high school | <input type="checkbox"/> I. Holds more than one college degree |
| <input type="checkbox"/> E. Graduated from high sch. | |
4. Check the phrase that best describes your family income:
- ☐ A. Always short of the necessities
- ☐ B. Often have difficulty making ends meet
- ☐ C. Sometimes have difficulty getting the necessities
- ☐ D. Have most necessities but almost no luxuries
- ☐ E. Comfortable; have a few luxuries
- ☐ F. Quite-well-to-do; have most things we really want
- ☐ G. Well-to-do; have practically all the things we want
- ☐ H. Wealthy
5. Approximately how many books does your family have?
- ☐ A. Almost none (0-10)
- ☐ B. A few books (11-25)
- ☐ C. About one bookcase full (26-100)
- ☐ D. About two bookcases full (101-250)
- ☐ E. About three to four bookcases full (251-500)
- ☐ F. A room or library full (over 500)
6. When you were in high school, what did your parents most want you to do after you left school? (If meeting military obligations came first, what did they want you to do later?)
- ☐ A. Go to college
- ☐ B. Go to trade or technical school
- ☐ C. Enter a military career
- ☐ D. Get a job (or do farming if this applies)
- ☐ E. Never let me know what they wanted
- ☐ F. Get married (girls only please!)
- ☐ G. Other (please indicate what) _____
7. What did most of your close friends plan to do after they graduated or left school?
- | | |
|---|---|
| <input type="checkbox"/> A. Go to college | <input type="checkbox"/> E. Get married |
| <input type="checkbox"/> B. Go to trade or techni.Sch. | <input type="checkbox"/> F. Most had no plans after high school |
| <input type="checkbox"/> C. Enter a military career | |
| <input type="checkbox"/> D. Get a job (or work on farm) | <input type="checkbox"/> G. Other (please explain) _____ |
8. What grade were you in when you left school?
- ☐ 12; ☐ 11; ☐ 10; ☐ 9; ☐ 8 or lower
9. Students leave school for many reasons. Please tell just briefly why you left.

10. What are you doing now?
- ☐ A. Working (please indicate the kind of job) _____
 - ☐ B. In service (please indicate branch) _____
 - ☐ C. Going to some other school (please name the school and the course you are taking) _____
 - ☐ D. Unemployed
 - ☐ E. Other (please indicate what) _____
11. If you should have the good fortune to be able to realize your greatest ambitions, what would you become, or what career or occupation would you follow?
12. Considering the practical problems and facts of life, what do you actually think you will become, or what career or occupation do you think you will enter?
13. If you had had a problem in trying to decide on a career or vocation when you were still in school, to whom would you most likely have gone to get help on this problem? (This person could be someone in school or someone outside of school. Please give title or relationship to you, not the name). _____
14. If you had had a problem relating to school (classes, teachers, etc.) to whom would you most likely have gone for help (again, give title or relationship to you). _____
15. If you had had a personal problem that was of real concern to you while in school, to whom would you most likely have gone to get help on this problem? (Again, give title or relationship to you). _____
16. Was there at least one counselor in your school? Yes ☐ No ☐
17. If not, was there someone in the school whose job it was to do counseling, at least part time? Yes ☐ No ☐
- If there was no one in your school who served as a counselor, skip item 18, and go on to item 19. If there was someone, answer item 18.
18. Did you ever go to see a school counselor? Yes ☐ No ☐
19. Most schools have some kind of guidance program; or at least someone who tries to help students whether or not there is a counselor in the school. Would you please look over the list below, and check all those items that tell of ways in which you received help from someone in the school. For each item you check "yes", write the title of the person who helped you at the right (counselor, principal, coach, English teach., etc.).

<u>Received Help</u>		<u>Kind of Help</u>	<u>For Items Checked "yes", Who Helped? (give title)</u>
<u>Yes</u>	<u>No</u>		
___	___	A. Help in getting to know the school	_____
___	___	B. Help in changing classes or subjects	_____
___	___	C. Help in choosing which courses to take	_____
___	___	D. Help in planning my courses in high school so they would fit into my post high school plans	_____
___	___	E. Information about my test scores	_____
___	___	F. Help in learning how to study or improve grades	_____
___	___	G. Help in getting teachers to understand me better	_____
___	___	H. Help when I was in trouble in school (if this applies to you)	_____
___	___	I. Help in better understanding my abilities, interests, aptitudes, etc.	_____
___	___	J. Help in getting my parents to understand me better	_____
___	___	K. Help in better understanding myself (my feelings, moods, troubles with family, dating troubles, etc.)	_____
___	___	L. Information about trade or vocational schools	_____
___	___	M. Information about colleges	_____
___	___	N. Information about military service	_____
___	___	O. Information about different occupations and careers	_____
___	___	P. Help in getting scholarship or other financial aid regarding my schooling	_____
___	___	Q. Help in finding part time or summer work	_____
___	___	R. Help in finding work when I left school	_____
___	___	S. Help in deciding on a college or vocational school to fit my needs and abilities	_____
___	___	T. Help in trying to decide on my career, considering my aptitudes, interests, etc.	_____
___	___	U. Other kinds of help (please list) _____	_____

20. When you were about to leave, did anyone at the school try to help you to stay in school or decide what to do when you left? Yes___No___
 If "yes" who tried to help? (Give title)_____

What help did the person give who talked with you?

As you now think back to the time you were in school, what suggestions do you have for help that could be given to students?

Thank you again for cooperating in trying to make guidance better for future students.

Project Number 095
Contract Number 5-85-035

STATE OF MINNESOTA
DEPARTMENT OF EDUCATION
CENTENNIAL OFFICE BUILDING
ST. PAUL 1, MINNESOTA

MINNESOTA GUIDANCE RESEARCH

High School Graduate Questionnaire

Student Code _____
School _____ School Code _____
Male _____ Female _____ Single _____ Married _____ Other _____ No. Children _____

Course or Curriculum you followed in High School (general, college preparatory, business, agriculture, some combination such as college preparatory and business, etc.) _____

We have tried to word the items as clearly as possible, but if you still have some question about any of them, please explain on the form what the problem is. Feel free to make any other comments you wish.

The first few questions are about matters other than guidance, since guidance is only one of the possible influences in a student's life.

1. Occupation of chief wage-earner (father or the person who brings in most of the family income). Please name or describe the job or occupation as exactly as possible here _____

If you cannot give the title or description, check the group below that is most like the work done by the wage-earner.

- _____ A. Office work (bookkeeper, cashier, postal clerk, secretary, paymaster, bill collector, stenographer, telegraph operator, stock clerk, business-machine operator, hotel clerk, etc.)
- _____ B. Owner or manager, farm.
- _____ C. Factory worker (machine operator, farm worker, timber cutter, saw operator, butter packer, meat curer, mine worker, janitor, road laborer, etc.)
- _____ D. Profession (lawyer, doctor, engineer, C.P.A., teacher, minister, dentist, chemist, county agent, pharmacist, etc.)
- _____ E. Sales (real estate, insurance, retail store, farm implements, auctioneer, etc.)
- _____ F. Service occupation (postman, fireman, policeman, barber, beautician, military service, bartender, etc.)
- _____ G. Skilled trade (millwright, machinist, carpenter, shop foreman, bricklayer, auto mechanic, electrician, etc.)
- _____ H. Owner or manager, business (store, gas station, garage, insurance agency, hotel, repair shop, credit manager, building manager, etc.)
- _____ I. No usual or regular employment
- _____ J. Other occupation that does not fit above (please give name) _____

Are you the wage-earner referred to above? Yes _____ No _____

2. Education of father: (Check highest level attained)
- | | |
|--|--|
| <input type="checkbox"/> A. Did not attend school | <input type="checkbox"/> F. Bus. or trade school |
| <input type="checkbox"/> B. Some grade school | <input type="checkbox"/> G. Some college work |
| <input type="checkbox"/> C. Completed eighth grade | <input type="checkbox"/> H. Graduated from college |
| <input type="checkbox"/> D. Some high school | <input type="checkbox"/> I. Holds more than one college degree |
| <input type="checkbox"/> E. Graduated from high sch. | |
3. Education of mother: (Check highest level attained)
- | | |
|--|--|
| <input type="checkbox"/> A. Did not attend school | <input type="checkbox"/> F. Bus. or trade school |
| <input type="checkbox"/> B. Some grade school | <input type="checkbox"/> G. Some college work |
| <input type="checkbox"/> C. Completed eighth grade | <input type="checkbox"/> H. Graduated from college |
| <input type="checkbox"/> D. Some high school | <input type="checkbox"/> I. Holds more than one college degree |
| <input type="checkbox"/> E. Graduated from high sch. | |
4. Check the phrase that best describes your family income:
- | |
|---|
| <input type="checkbox"/> A. Always short of the necessities |
| <input type="checkbox"/> B. Often have difficulty making ends meet |
| <input type="checkbox"/> C. Sometimes have difficulty getting the necessities |
| <input type="checkbox"/> D. Have most necessities but almost no luxuries |
| <input type="checkbox"/> E. Comfortable; have a few luxuries |
| <input type="checkbox"/> F. Quite well-to-do; have most things we really want |
| <input type="checkbox"/> G. Well-to-do; have practically all the things we want |
| <input type="checkbox"/> H. Wealthy |
5. Approximately how many books does your family have?
- | |
|--|
| <input type="checkbox"/> A. Almost none (0-10) |
| <input type="checkbox"/> B. A few books (11-25) |
| <input type="checkbox"/> C. About one bookcase full (26-100) |
| <input type="checkbox"/> D. About two bookcases full (101-250) |
| <input type="checkbox"/> E. About three to four bookcases full (251-500) |
| <input type="checkbox"/> F. A room or library full (over 500) |
6. When you were in high school, what did your parents most want you to do after you graduated? (If meeting military obligations came first, what did they want you to do later?)
- | |
|---|
| <input type="checkbox"/> A. Go to college |
| <input type="checkbox"/> B. Go to trade or technical school |
| <input type="checkbox"/> C. Enter a military career |
| <input type="checkbox"/> D. Get a job (or do farming if this applies) |
| <input type="checkbox"/> E. Never let me know what they wanted |
| <input type="checkbox"/> F. Get married (girls only please!) |
| <input type="checkbox"/> G. Other (please indicate what) |
7. What did most of your close friends plan to do after they graduated?
- | |
|---|
| <input type="checkbox"/> A. Go to college |
| <input type="checkbox"/> B. Go to trade or technical school |
| <input type="checkbox"/> C. Enter a military career |
| <input type="checkbox"/> D. Get a job (or work on the farm) |
| <input type="checkbox"/> E. Get married |
| <input type="checkbox"/> F. Most had no plans after high school |
| <input type="checkbox"/> G. Other (please explain) _____ |
8. When you were a senior, what did you plan to do the following year?
-

9. What are you doing now?
 _____ A. Working (please indicate the kind of job) _____
 _____ B. In service (please indicate branch) _____
 _____ C. Going to some other school (please name the school and the
 course you are taking) _____
 _____ D. Unemployed
 _____ E. Other (please indicate what) _____
10. If you should have the good fortune to be able to realize your greatest ambitions, what would you become, or what career or occupation would you follow?
11. Considering the practical problems and facts of life, what do you actually think you will become, or what career or occupation do you think you will enter?
12. If you had had a problem in trying to decide on a career or area of study for a vocation in high school, to whom would you most likely have gone to get help on this problem? (This person could be someone in school or someone outside of school. Please give title or relationship to you, not the name). _____
13. If you had had a problem relating to school (classes, teachers, etc.), to whom would you most likely have gone for help (again, give title or relationship to you). _____
14. If you had had a personal problem that was of real concern to you while in high school, to whom would you most likely have gone to get help on this problem? (Again, give title or relationship to you). _____
15. Was there at least one counselor in your school? Yes _____ No _____
16. If not, was there someone in the school whose job it was to do counseling, at least part time? Yes _____ No _____
- (If there was no one in your school who served as a counselor, skip questions 17-19 and go on to question 20. If there was someone, go on to question 17).
17. Did you ever go to see the school counselor? Yes _____ No _____
18. About how many times did you have visits or interviews with a counselor during the senior high school years (grades 10-12)? Try to remember as exactly as you can. _____ times.
19. About how long were these visits usually, or on the average? _____ min.
20. Most schools have some kind of guidance program; or at least someone who tries to help students in some way. Would you please look at the list below, and check all those items that tell of ways in which you received help from someone in the school.

Then, for each item you have checked "yes", write the title of the person who helped you (e.g., counselor, coach, English teacher, principal, etc.)

<u>Received</u>		<u>Kind of Help</u>	<u>For Items</u>
<u>Help</u>	<u>Checked "yes",</u>		
<u>Yes</u>	<u>No</u>		<u>Who Helped?</u>
			<u>(give title)</u>
___	___	A. Help in getting to know the school	_____
___	___	B. Help in changing classes or subjects	_____
___	___	C. Help in choosing which courses to take	_____
___	___	D. Help in planning my courses in high school so they would fit into my post high school plans	_____
___	___	E. Information about my test scores	_____
___	___	F. Help in learning how to study or improve grades	_____
___	___	G. Help in getting teachers to understand me better	_____
___	___	H. Help when I was in trouble in school (if this applies to you)	_____
___	___	I. Help in better understanding my abilities, interests, aptitudes, etc.	_____
___	___	J. Help in getting my parents to understand me better	_____
___	___	K. Help in better understanding myself (my feelings, moods, troubles with family, dating troubles, etc.)	_____
___	___	L. Information about trade or vocational schools	_____
___	___	M. Information about colleges	_____
___	___	N. Information about military service	_____
___	___	O. Information about different occupations and careers	_____
___	___	P. Help in getting scholarship or other financial aid regarding my schooling	_____
___	___	Q. Help in finding part time or summer work	_____
___	___	R. Help in finding work when I graduated	_____
___	___	S. Help in deciding on a college or vocational school to fit my needs and abilities	_____
___	___	T. Help in trying to decide on my career, considering my aptitudes, interests, etc.	_____
___	___	U. Other kinds of help (please list)	_____
		_____	_____
		_____	_____

Project Number 095
Contract Number 5-85-035

STATE OF MINNESOTA
DEPARTMENT OF EDUCATION
CENTENNIAL OFFICE BUILDING
ST. PAUL 1, MINNESOTA

MINNESOTA GUIDANCE RESEARCH

1966 Graduate Questionnaire

1. What are you doing now? (If temporarily on vacation, please check what you were doing this spring and plan to do again later.)

☐ Working. Job title _____
Brief description of what you do _____

☐ College. Name of college _____
Address _____
Course or major interest _____

☐ Other school. Name of school _____
Address _____
Course _____

☐ Military Service. Branch _____
Present location _____
Specialty of kind of assignment _____

☐ Married, not working (girls only)
No. children if any _____

☐ Unemployed. Illness _____
Accident _____
Waiting to enter service _____
Looking for work _____
Other (Please explain) _____

2. How do you feel about your situation as checked above? (Disregard any temporary situation that is likely to change soon.)

☐ Completely satisfied and happy with my present situation.
☐ Reasonably satisfied and happy most of the time with my present situation.
☐ Fairly satisfied but at times I have some negative feelings about my situation.
☐ Fairly dissatisfied, although at times it seems all right.
☐ Quite dissatisfied, often wish things were different.
☐ Completely dissatisfied and unhappy with my present situation.

Write any additional comments on back of this page if you wish to explain your answers above.

3. Now that you have been out of high school for a year, would you look back at your guidance program and indicate the ways in which it helped you from the list below, checking "yes" or "no" for each kind of help listed, and

for each "yes" indicating who helped you (by title, not name, e.g. principal, counselor, English teacher, coach, etc.)

<u>Received Help</u>		<u>Kind of Help</u>	<u>For Items Checked "yes", Who Helped? (give title)</u>
<u>Yes</u>	<u>No</u>		
___	___	A. Help in getting to know the school	_____
___	___	B. Help in changing classes or subjects	_____
___	___	C. Help in choosing which courses to take	_____
___	___	D. Help in planning my courses in high school so they would fit into my post high school plans	_____
___	___	E. Information about my test scores	_____
___	___	F. Help in learning how to study or improve grades	_____
___	___	G. Help in getting teachers to understand me better	_____
___	___	H. Help when I was in trouble in school (if this applies to you)	_____
___	___	I. Help in better understanding my abilities, interests, aptitudes, etc.	_____
___	___	J. Help in getting my parents to understand me better	_____
___	___	K. Help in better understanding myself (my feelings, moods, troubles with family, dating troubles, etc.)	_____
___	___	L. Information about trade or vocational schools	_____
___	___	M. Information about colleges	_____
___	___	N. Information about military service	_____
___	___	O. Information about different occupations and careers	_____
___	___	P. Help in getting scholarships or other financial aid regarding my schooling	_____
___	___	Q. Help in finding part time or summer work	_____
___	___	R. Help in finding work when I left school	_____
___	___	S. Help in deciding on a college or vocational school to fit my needs and abilities	_____
___	___	T. Help in trying to decide on my career, considering my aptitudes, interests, etc.	_____
___	___	U. Other kinds of help (please list)	_____

4. Now, thinking about the guidance program in general, about how helpful was it to you? (Check some point on the scale.)

No Help At All	1	2	3	4	5	6	7	Extremely Helpful
----------------	---	---	---	---	---	---	---	-------------------

5. Comments: Please feel free to make any comments at all that you think might be helpful or that you wish to make about guidance in general or the guidance at your school. Continue on back if necessary.

THANK YOU AGAIN!

APPENDIX C

Correspondence and Other Materials Used in Carrying Out the Survey. *

	<u>Page</u>
a. Initial letter to superintendents asking their cooperation	C-1a
b. Postal card for reply	C-2a & b
c. Letter to principal about upcoming visit	C-3c
d. Check list for field workers	C-4c & d
e. Form for collecting information on proportions of class going to post high training and dropouts	C-5d & e
f. Statement for news media given to schools	C-6f
g. Overall rating form on counselors to be done by field workers	C-7g
h. Letter to counselor requesting test administration	C-9h
i. Letter to sample of dropouts and graduates	C-10i
j. Second contact note to dropouts and graduates	C-11j
k. Letter to training institutions requesting information on training success	C-12k
l. Letter to 1966 seniors a year later	C-13-l

* The forms given here are copies fitted to the reduced page size of this report. The original forms were, of course, more appropriately arranged on larger sized forms.

Date

Superintendent (each one personally addressed)

Address

City, State

Dear Mr. _____:

Guidance programs have become more and more an accepted function in our secondary schools, and most of us feel confident that these services are of real value in furthering our total educational aims. However, very little actual information has been obtained relative to the effectiveness of our guidance programs. We feel it is important to begin collecting such information, so that it can be used to further improve our guidance practices.

The Minnesota State Department of Education has received a grant from the U. S. Office of Education to conduct a study of our guidance programs in Minnesota, and has retained Dr. A. W. Tamminen of the University of Minnesota, Duluth, to carry out the study. The original plan for the study was conceived by a research committee which included representation from the Minnesota Association of School Administrators, the Minnesota Association of Secondary School Principals, the Minnesota Counselors Association, the University of Minnesota and the Minnesota National Laboratory.

In order to carry out this research study, it will be necessary to collect information from a broad sample of senior high schools in the state. A tentative random sample of schools has been drawn, and your school was selected to be a part of that sample. The purpose of this letter is to request your cooperation in carrying out this pioneering study of guidance.

Your decision to participate would involve the following:

1. Your counselor(s) and/or guidance personnel, and either you or the building administrator will receive a questionnaire form requesting information about the school;
2. Your guidance people will be requested to give a few tests to a random sample of from 10 to 30 of your senior high school students, depending on the size of your school;
3. Later, field workers on the project will visit your school, pick up these forms, answer your questions, talk with selected students, and ask a few of your teachers to fill out a short form.

All information collected from your school will be held in the strictest confidence and will be known to no one except the research team. Only an

C-1a

Superintendent

- 2 -

Date

acknowledgement of your cooperation will identify your school. The purpose of the study is not to evaluate any individual school, but to gather information to see whether the things we are doing in guidance throughout the state are related in any way to outcomes we hope for and expect from guidance.

Your cooperation will be very much appreciated, and you will receive a final report of the study which should provide you with valuable information and a sounder basis for policy decisions regarding your guidance program.

Will you please return the enclosed card, indicating whether you are willing to cooperate in the study, and listing the names of your counselors or guidance workers.

Sincerely yours,

Duane J. Mattheis
Commissioner of Education

Enclosure
DJM/AWT:jc

We will _____ participate in the Minnesota Guidance Research Project.
will not _____
The name(s) of the person(s) who engage in counseling and/or guidance
at our school is (are): _____

Name of School _____

Address _____

Superintendent _____

(Signature)

C-2a & b

Date

Principal (each one personally addressed)

School

Address

City, State

Dear Mr. _____:

Some time ago your superintendent received a letter from Commissioner Mattheis, asking whether your school wished to participate in a statewide study of guidance in Minnesota, and he replied that you would participate. You probably saw the letter, but you may wish to review the description of the study given in that letter.

We are now beginning our field work, and in order to give you and your guidance people time to consider the questionnaires carefully, we are sending them out to all of the participating schools at this time. Within the next two months we will contact you in order to arrange a visit by one of our teams of field workers.

Three types of questionnaires are enclosed. One, the General Information Questionnaire, asks essentially for the kind of information that you can best provide. The other two, the General Guidance Questionnaire and the Individual Counselor Questionnaire, are primarily for your guidance people. We would appreciate your sharing this letter with them.

The team of two field workers will want to spend about two days in your school. In addition to picking up these questionnaires and discussing them with you, they will want to arrange to see a random sample of your seniors, drawn from the statewide testing list, and a few of your teachers. They will need about an hour to administer some instruments to the seniors, and will subsequently wish to talk briefly with these students individually about their questionnaires. The teacher questionnaire takes about ten minutes.

Either before the field workers arrive or at a later date, we will send your guidance people three other instruments to be administered to this same small sample of seniors at a convenient time. This will complete the information collected.

Once again, thank you for your cooperation. If you have questions that should be answered prior to the arrival of the field workers, feel free to

C-3c

Principal

- 2 -

Date

contact me or Mr. Dean Miller, State Department of Education, Centennial Building, St. Paul, Minnesota.

Sincerely yours,

A. W. Tamminen
Project Director
Minnesota Guidance Research

Enclosures

AWT:jc

CHECK LIST FOR FIELD WORKERS

____ 1. Courtesy visit to Superintendent

____ 2. Principal

- ____ A. Show copy of explanation of project (or letter to Superintendent) - answer questions.
- ____ B. Review General Information Questionnaire (later if more convenient)
- ____ C. Draw sample of 6 teachers
- ____ D. Arrange to work with counselor; indicating what is to be done.

____ 3. Counselor

- ____ A. Show him copy of explanation (above).
- ____ B. Find out when you can get seniors together (sooner the better).
- ____ C. Show materials to be given to students and teachers.
- ____ D. Go over General Guidance Questionnaire (later if more convenient)
- ____ E. Go over Individual Counselor Questionnaire (with all counselors if more than one).
- ____ F. Arrange to contact six teachers and give them the Teacher Questionnaire.
- ____ G. Request addresses of the sample of last year's grads.
- ____ H. Ask for names and addresses of the six dropouts.
- ____ I. Get estimate of (1) upper and (2) lower 15% of last year's class that went to college or vocational school.
- ____ J. Indicate that they will be asked to administer three additional tests to the sample.
- ____ K. In one-counselor school, note sex and marital status of counselor in upper left corner of Individual Counselor form.

C-4c & d

Check List for Field Workers - 2 -

- _____ 4. Students
- _____ A. Explain purpose of project and request their cooperation (stress confidentiality)
 - _____ B. Administer: What Your School Is Like
Academic Self-Estimate
Adjective Check List
Student Questionnaire
 - _____ C. Find out free period for the interview
 - _____ D. Interview students individually
- _____ 5. Other Related Procedures
- _____ A. Check guidance facilities
 - _____ B. Check cumulative records of students in sample (dozen at most)
 - _____ C. Check occupational-educational library of materials
- _____ 6. Leave news release if they want it
- _____ 7. Express appreciation to school staff for cooperation (one team reports that they are writing a note of thanks after leaving)

Name of School _____ Code No. _____

From Last Year's Class:	Of the Top 15%	Of the Low 15%
Percent who went to college		
Percent who went to trade or vocational school		

DROPOUTS

Please obtain the names and, if possible, current addresses of six senior or junior students who dropped out in the last year or two. (NOT transfers). If many dropouts have occurred, select six randomly. If current address is not available, then home address while in school.

NAME	ADDRESS
1.	
2.	
3.	
4.	
5.	
6.	

C-5d & e

LOCAL SCHOOL PARTICIPATES IN STATE GUIDANCE RESEARCH

The _____ Senior High School has been selected as one of 85 Minnesota schools to participate in the first known study of its kind in the nation of high school guidance programs. The project is being conducted by Dr. A. W. Tamminen of the University of Minnesota, Duluth, Director, and Mr. G. Dean Miller, State Department of Education Guidance Consultant. Field workers associated with the project visited the _____ Senior High School on _____ and _____ to collect data on the guidance program of the school. Cooperating in the study were _____ Senior High Principal, _____ Director of Guidance, _____ Counselors, as well as a randomly selected group of teachers and students.

The purpose of the State Department of Education study, according to Dr. Tamminen, is to find out how the various aspects of guidance programs in the state are related to outcomes that such programs are intended to produce. "The results," said Dr. Tamminen, "will, we hope, help shape future policy decisions regarding guidance and will point the way to further research."

"The high school student wants to live in such a way that he can follow his interests, utilize his skills and talents, and achieve satisfaction and reward in so doing. Guidance programs are designed to assist him in reaching these goals; it is, therefore, important to find out how well guidance is reaching these goals. Unless we carry out this type of research, we are forced to rely pretty much on faith that the money expended on guidance is actually producing the hoped-for results."

The research is being sponsored under a grant from the U. S. Office of Education and is scheduled to be completed by August, 1967.

OVERALL RATING OF COUNSELOR EFFECTIVENESS

After you have visited all or most of your schools, we should like to have you make comparative ratings of the effectiveness of these counselors. I would suggest a five-point scale, as follows:

5. Unusually effective
4. Definitely above average
3. Approximately average
2. Definitely below average
1. Unusually ineffective

I would expect that only a few would be found at the extremes, more in the middle categories.

It would be well to make some notes after each school visit, to avoid having to rely on memory alone. The following may serve as a guide.

To be effective, a counselor should be:

1. Open, approachable, comfortable and nonhostile rather than rigid and defensive as a person; essentially not a judgmental person but accepting of and able to work with all kinds of kids, including non-college-bound, the slower students, and the troublesome ones;
2. Knowledgeable about the student population and the individual kids--about their needs, problems, assets and abilities, their opportunities and barriers;
3. Enthusiastic about his work and its importance, and vitally interested in kids;
4. Growing, striving to improve his knowledge, skills, and services;
5. Effective in relationships with teachers, administration, parents, the community;
6. Outreaching--not just in his office but getting to know and serve students and community;
7. Engaged largely in actual personal, counseling-type activities with individuals and groups, rather than in routine functions such as scheduling classes or handing out information.

Some evidence to look for:

1. The Students: not only what they mark down but what they say about him as a person (not merely "good guy" but also his helpfulness, is he easy to talk to, approachable; does he have time; do they actually go to him; etc. PLUS evidence that he actually IS helping them with important matters and that they actually DO go to see him about such matters.

2. Evidence that TEACHERS consider him effective and helpful to kids and to them in GUIDANCE matters (but be careful here; some teachers consider him good if he does their disciplinary work, handles routine matters for them, etc.)
3. Evidence of self-improvement, such as prof. organizations, journals, follow up studies that are actually used to make improvements, and the like.
4. Evidence of time spent in actual counseling (indiv. & group), parent contacts, etc.,
5. Evidence of effective use of resources (occup. info., tests, outside resources, etc.)
6. Your own judgment of the kind of person he is, enthusiasm, relations to others, etc.

Date

TO: Counselor or Guidance Director
FROM: A. W. Tamminen, Project Director
Minnesota Guidance Research
SUBJECT: Administration of Final Three Instruments

At the time our field workers visited your school to collect information for the study of guidance in Minnesota they indicated that, at a later date, we would like to have you administer three additional instruments to the sample of seniors in the study. These materials are enclosed.

Originally we hoped to be able to administer all instruments during the visit, but it soon became apparent that it would be too disruptive of classes to pull the students out for so long a time in two days. With some reluctance we decided to mail these tests out later. We now appeal to you for your cooperation in administering them at convenient times in the next few days.

As you know, some of the information we collected is "situational" rather than directly guidance-related. We felt we needed a common measure of general ability (the A.G.C.T.), a common measure of achievement in an area to which all are exposed (I.T.E.D. No. 5, Interpretation-Social Studies), and a common measure of attitudes towards vocations and vocational choices (John Crites' Vocational Development Inventory). These, then, are the instruments enclosed.

Also enclosed are instructions for administering, a set of electrographic pencils, a stamped return envelope, and a coded list of the seniors in the sample. Please make sure that the students' name and code number are on the answer sheets and that no other pencil is used in marking. Since we do not have enough materials to send out to all schools at once, we must wait until you return these materials (including pencils), and then send them out again. For this reason, we would deeply appreciate having you administer and return the tests within a week if at all possible. Thanks!

If you have **ALREADY ADMINISTERED** the I.T.E.D. Test No. 5 this year, of course there is no need to have them retake it. Simply report the scores of the sample (actual scores rather than percentiles, please).

Once again, thank you for your excellent cooperation with the field workers and the project; we continuously get glowing reports about the fine welcome and cooperation the field workers have received. Be assured that this is the end of the data gathering and that all data are confidential and will not be used for evaluating individual schools.

C-9h

Date

Miss (Mr.) _____ (addressed personally)

Address

City, State

Dear M _____:

How much help are students in Minnesota schools getting from guidance counselors or teachers? What kind of help? Which students get help? If we had answers to these questions, our schools and guidance programs could do a better job. And we need your help in getting answers to these questions.

We are doing a study of some Minnesota schools, and the school you attended was selected as one of those in the sample. Then we took a sample of students now in your school and also former students, and your name was one of those drawn. This study can be of real value to future students if you will take a few minutes to fill out the questionnaire attached and return it to us in the enclosed stamped envelope. We can then provide schools with helpful information based on your ideas and suggestions.

Your answers to these questions will be known to NO ONE except the research team working on this study. It is important for you to be as frank and accurate as you can in answering the questions. We want your honest opinions and ideas, no matter how you feel about the school and its guidance program. Note that you do not need to put your name on the questionnaire. We are using code numbers instead of names so that no one will know who is answering.

In addition to answering the questions, please feel free to write as much as you wish on the form, giving us your ideas about the guidance you did or did not receive, and your suggestions about the help students should receive.

Would you please fill out the form and send it in right away, before you forget. Thank you very much for your help.

Sincerely yours,

A. W. Tamminen
Project Director
Minnesota Guidance Research

Attachment
AWT/jf

C-10i

Department: Education

OFFICE MEMORANDUM

Date:

TO: Student (addressed by name)
FROM: A. W. Tamminen, Project Director
Minnesota Guidance Research
SUBJECT: The Attached Materials

Do you remember receiving a copy of the attached letter and questionnaire?

Since we haven't heard from you, I thought the materials may have gotten lost.

You are one of a very small sample selected to help us learn more about guidance in Minnesota high schools, so it is very important to get your views.

If you have already sent in the other copy, just toss this. If not, we would very much appreciate your taking about ten minutes to fill this out now and drop it in the mail -- in the enclosed postage-free envelope.

Thank you for helping.

C-11j

Date

Director of Admissions
Name of Institution
Address

Dear _____: (registrar)

You may remember that a year ago we sent you one or more cards naming students in your institution and providing a scale on which we asked you to check their progress. At that time I explained that we were conducting an evaluative study of high school guidance programs in Minnesota, and had contacted a sample of graduates from high schools in our state.

We are now concluding our study by following up the sample of seniors whom we interviewed last year. We wrote to each of them and the names on the attached cards are those of students who have responded up to now, and who indicated that they attended your institution this past year.

After the returns on this final survey are compiled, we will not need to contact any more students or to trouble you again. I realize that you are very busy, but I do hope you can find time to check the cards enclosed, or to send us a copy of the transcripts, if you would prefer to do that.

Once more, let me give you my word that this information will be held in the strictest confidence and will be known to no one except my research team. We are interested in and will report correlations and other general figures, but under no circumstances will we attach names of students, high schools, or post-high institutions to any reports.

Thank you once again for your cooperation last year. If you wish a copy of the final report, please indicate this in your reply.

Sincerely yours,

A. W. Tamminen
Project Director
Minnesota Guidance Research

AWT/lab

Enclosures

C-12k

MINNESOTA GUIDANCE RESEARCH PROJECT

Date

Name (personally addressed)
Address

Dear _____:

You were one of a few high school seniors selected to take part in a research project about high school guidance and counseling in Minnesota. You will recall that two people visited your high school last year and interviewed you regarding your feelings about your guidance program. Your help then was greatly appreciated, and I believe the field worker told you that we wanted to contact you once more a year later.

Now that you have been out of high school for a year, we would like to have you take one more look at your guidance program and at how things are going for you, and to provide us with some additional information. Remember, this information will be known to no one but the research team, so please be frank and honest.

Would you please take a few moments to fill out the enclosed form. Would you be so good as to do it right away and mail it back in the enclosed stamped envelope as we want to be sure that your opinions are included in our study.

Thank you again, and good luck in your future.

Cordially yours,

A. W. Tamminen
Project Director

AWT/lab

Enclosure

C-13-1

APPENDIX D

Key to Coding of Data

	<u>Page</u>
a. General Information Questionnaire	D-1a
b. General Guidance Questionnaire	D-4b
c. Individual Counselor Questionnaire	D-6b & c
d. Teacher Questionnaire	D-7d & e
e. Student Questionnaire	D-7d & e
f. Coding of Dropout Questionnaire	D-10f
g. Coding of High School Graduate Questionnaire	D-12g

General Information Questionnaire

To be entered in home office. See that item is completed.

2-4. Enter actual number of seniors.

5. Enrollment change.

- | | | | | |
|-------------------|-----------|-----------|--------------|-------------|
| 9. Over 30% incr. | 7. 21-25% | 5. 11-15% | 3. 1-5% | 1. Decrease |
| 8. 26-30% | 6. 16-20% | 4. 6-10% | 2. No change | |

6. Percent men teachers

- | | | | | |
|-------------|-----------|-----------|-----------|-----------------|
| 9. Over 85% | 7. 66-75% | 5. 46-55% | 3. 26-35% | 1. 15% or fewer |
| 8. 76-85% | 6. 56-65% | 4. 36-45% | 2. 15-25% | |

7. Percent teachers holding advanced degrees. Code as No. 6.

8. Ave. years of teaching experience.

- | | | |
|---------------------|----------|----------------------|
| 9. 18 or more years | 6. 12-13 | 3. 6-7 |
| 8. 16-17 | 5. 10-11 | 2. 4-5 |
| 7. 14-15 | 4. 8-9 | 1. Less than 4 years |

9. Ave. Salary

- | | | |
|-----------------|----------------|------------------|
| 9. Over \$8,000 | 6. 6,651-7,000 | 3. 5,701-6,100 |
| 8. 7,401-8,000 | 5. 6,451-6,650 | 2. 5,201-5,700 |
| 7. 7,001-7,400 | 4. 6,101-6,450 | 1. 5,200-or less |

10. No. Days in School Year.

- | | | |
|----------------|------------|----------------|
| 9. 182 or more | 6. 177 | 3. 172-173 |
| 8. 180-181 | 5. 176 | 2. 170-171 |
| 7. 178-179 | 4. 174-175 | 1. 169 or less |

11. Length of Class Periods

- | | |
|--------------------|---------------|
| 5. Over 55 minutes | 2. 41-45 |
| 4. 51-55 minutes | 1. 40 or less |
| 3. 46-50 | |

12. Ave. Class Size

- | | | |
|---------------|----------|----------------|
| 1. 36 or more | 4. 27-29 | 7. 18-20 |
| 2. 33-35 | 5. 24-26 | 8. 15-17 |
| 3. 30-32 | 6. 21-23 | 9. 14 or fewer |

13. Total number of subjects offered. Give actual number.

14. Ability grouping. Change figure to percent, by dividing number given (in which there is grouping) by total number of subjects (from prev. Ques.)

- | | | |
|-------------|----------|----------|
| 9. Over 70% | 6. 41-50 | 3. 11-30 |
| 8. 61-70 | 5. 31-40 | 2. 1-10 |
| 7. 51-60 | 4. 21-30 | 1. None |

15. Reasons for grouping. For any and each of the following reasons given, score 2 points: Spec. aptitude tests(s) in that subj. area; Spec. achievement tests(s) in that subj. area; Grades in that subj.

For any of the following reasons, score 1 point: Gen. measured abil. (or IQ); Gen. overall grade ave.; Teacher judgment; Free choice by stud.; Other methods (such as "evidence of ability" not explained)

Code as follows:

- | | | |
|-------------------|-----------|-----------------|
| 9. 9 or more pts. | 6. 6 pts. | 3. 3 pts. |
| 8. 8 pts. | 5. 5 | 2. 2 |
| 7. 7 | 4. 4 | 1. 1 or no pts. |

16. Count number of special classes, giving one point to each, and code as follows:
- | | | | | |
|--------------|--------------|--------------|--------------|-------------------|
| 9. 8 or more | 7. 6 classes | 5. 4 classes | 3. 2 classes | 1. No spec. class |
| 8. 7 classes | 6. 5 | 4. 3 | 2. 1 | |
17. Special Experimental Programs
- | | | |
|-----------------------|------------|-------------|
| 5. Four or more areas | 3. 2 areas | |
| 4. 3 areas | 2. 1 area | 1. No area. |
18. Recognition for scholastic achievement
- | | | | | |
|--------------|------------|------------|------------|---------|
| 9. 8 or more | 7. 6 types | 5. 4 types | 3. 2 types | |
| 8. 7 types | 6. 5 | 4. 3 | 2. 1 | 1. None |
19. Extra-curricular Activities
- | | | | | |
|---------------|----------|----------|---------|---------------|
| 9. 21 or more | 7. 17-18 | 5. 13-14 | 3. 9-10 | 1. 6 or fewer |
| 8. 19-20 | 6. 15-16 | 4. 11-12 | 2. 7-8 | |
20. Facilities Available for Pupils
- | | | | | |
|---------------|----------|----------|----------|----------------|
| 9. 27 or more | 7. 23-24 | 5. 19-20 | 3. 15-16 | 1. 12 or fewer |
| 8. 25-26 | 6. 21-22 | 4. 17-18 | 2. 13-14 | |
21. Community Facilities Available
- | | | | | |
|---------------|-------|------|------|---------------|
| 9. 12 or more | 7. 10 | 5. 8 | 3. 6 | 1. 4 or fewer |
| 8. 11 | 6. 9 | 4. 7 | 2. 5 | |
22. If "other" is marked and explained, fit into best category by judgment. In general, the order is that of high to low-priced housing, from A to I. Score as follows:
- | | | |
|--------------------|------|------|
| 8. A, Suburb, res. | 5. D | 2. G |
| 7. B | 4. E | 1. H |
| 6. C | 3. F | |
23. Family Income. If bimodal, make a note and do not code.
- | | | |
|---------------|------|-----------------------------------|
| 8. H, Wealthy | 5. E | 2. B |
| 7. G | 4. D | 1. A, Always short of necessities |
| 6. F | 3. C | |
24. Percent college prep.
- | | | |
|-------------|----------|----------|
| 9. Over 70% | 6. 41-50 | 3. 11-20 |
| 8. 61-70 | 5. 31-40 | 2. 1-10 |
| 7. 51-60 | 4. 21-30 | 1. None |
25. Percent business
- | | | |
|----------------|----------|---------|
| 9. 22% or more | 6. 13-15 | 3. 4-6 |
| 8. 19-21 | 5. 10-12 | 2. 1-3 |
| 7. 16-18 | 4. 7-9 | 1. None |
26. Percent industrial or trade--USE SAME SCALE as prev. one (No. 25, bus.)
27. Percent cooperative. USE SAME SCALE as for No. 25, bus.
28. Percent vocational agriculture.
- | | | |
|----------------|----------|---------|
| 9. 50% or more | 6. 29-35 | 3. 8-14 |
| 8. 43-49 | 5. 22-28 | 2. 1-7 |
| 7. 36-42 | 4. 15-21 | 1. None |
29. Percent M. R.
- | | | |
|---------------|-------|---------|
| 9. 8% or more | 6. 5% | 3. 2% |
| 8. 7 | 5. 4 | 2. 1 |
| 7. 6 | 4. 3 | 1. None |
30. Other. USE SAME SCALE AS FOR NO. 24, college prep.
- NOTE: Items 31 and 32 are missing.

33. Distance to Nearest College.
 9. In tn. or w/in abt. 10 mi.
 8. 11-35 miles
 7. 36-60
 6. 61-85
 5. 86-110
 4. 111-135 miles
 3. 136-160
 2. 161-185
 1. Over 185 miles
34. Distance to Nearest Place Offering Vocational Training. Code as previous Item (distance to nearest college).
35. Dropouts - Boys
 9. 3% or less
 8. 4-7
 7. 8-11
 6. 12-15%
 5. 16-19
 4. 20-23
 3. 24-28%
 2. 29-34
 1. 35 or more
36. Dropouts - Girls. Code as previous item. (boys)
37. Juvenile Court. Change the figure to a percent by dividing by total no. in grades 10-12 (Front page of questionnaire). Code as follows:
 9. 8% or more
 8. 7
 7. 6
 6. 5%
 5. 4
 4. 3
 3. 2%
 2. 1
 1. None
38. Students hospitalized or receiving outpatient treatment. Change the figure to a percent by dividing by total number in grades 10-12 and code as No. 37. (Juvenile Court.)
- 39 & 40. Boys and girls attending college. Put code number next to the percent given. Put in parentheses.
 9. Over 70%
 8. 61-70
 7. 51-60
 6. 41-50%
 5. 31-40
 4. 21-30
 3. 11-20%
 2. 1-10
 1. None
41. & 42. Boys and girls attending vocational or technical school. Put code number in parentheses next to actual percent given.
 9. 22% or more
 8. 19-21
 7. 16-18
 6. 13-15%
 5. 10-12
 4. 7-9
 3. 4-6%
 2. 1-3
 1. None
43. Percent repeating courses.
 9. 15% or more
 8. 13-14
 7. 11-12
 6. 9-10%
 5. 7-8
 4. 5-6
 3. 3-4%
 2. 2
 1. None
44. Salary Budget for Guidance
 Divide total salary money by number of students for whom guidance is furnished. Go to General Guidance Questionnaire, I.B. to get no. receiving guidance.
Rating
 9. 38.01 or more
 8. 34.01 to 38.00
 7. 30.01 to 34.00
 6. 26.01 to 30.00
 5. 22.01 to 26.00
 4. 18.01 to 22.00
 3. 14.01 to 18.00
 2. 10.01 to 14.00
 1. 10.00 or less
45. Score as follows: 0 for each decrease; 1 for "no change"; 2 for each "some increase"; 3 for each "much increase". Add scores and code as follows:
 9. 46 or more pts.
 8. 41-45
 7. 36-40
 6. 31-35
 5. 26-30
 4. 21-25
 3. 16-20
 2. 11-15
 1. 10 or fewer pts.
46. Score 1-9 as checked.

Rating Form for General Guidance Questionnaire

1. No. of grades receiving guidance

- | | | |
|-----------------------|-------------|-----------------|
| 5. More than 6 grades | 3. 5 grades | |
| 4. 6 grades | 2. 4 | 1. 3 (or fewer) |

2-3-4. Student-counselor ratio. Record act. fig. given under 1, D.

5. No. yrs. NDEA approved

- | | | |
|-------------------------------|---------------------------------|--|
| 9. Fully approved over 6 yrs. | 4. Fully approved 2 yrs. | |
| 8. " " 6 years | 3. " " 1 " | |
| 7. " " 5 " | 2. Approved for less than 1 yr. | |
| 6. " " 4 " | 1. Never NDEA approved | |
| 5. " " 3 " | | |

(Note: This refers to this school only, not the school system.)

6. No. years of formal guidance

- | | | |
|-------------------|-----------|------------------|
| 9. 9 yrs. or more | 6. 6 yrs. | 3. 3 yrs. |
| 8. 8 | 5. 5 | 2. 2 |
| 7. 7 | 4. 4 | 1. 1 yr. or less |

7. Other personnel workers

Add up total full-time equivalent of all other personnel workers. Divide this fig. into total no. of stud. served by them (Item 1,B) to get ratio.

Rating

- | | | |
|--------------------|------------------|-------------------------------|
| 9. 1/200 or better | 6. 1/801-1/1100 | 3. 1/1701-1/2000 |
| 8. 1/201-1/500 | 5. 1/1101-1/1400 | 2. 1/2001-1/2300 |
| 7. 1/501-1/800 | 4. 1/1401-1/1700 | 1. Less than 1/2300 (or more) |

8. Referral resources. Add up total score.

- | | | |
|---------------|----------|-----------------|
| 9. 20 or more | 6. 14-15 | 3. 10 |
| 8. 18-19 | 5. 12-13 | 2. 9 |
| 7. 16-17 | 4. 11 | 1. 8 (or lower) |

9. Clerical help

- | | | |
|----------------------------|--|------------------------|
| 5. 5 days or more (E) | | 2. less than 1 day (B) |
| 4. over 2, less than 5 (D) | | 1. none (A) |
| 3. 1-2 days (C) | | |

10, 11, 12, 13, 14. Use actual figure given (1-5)

15. Add up score and code as follows:

- | | | |
|---------------|---------------|---------------|
| 9. 23 or more | 6. 16-17 pts. | 3. 10-11 pts. |
| 8. 20-22 pts. | 5. 14-15 | 2. 7-9 |
| 7. 18-19 | 4. 12-13 | 1. 6 or fewer |

16-20. Facilities

- | | |
|--------------------------------------|--------------------------------|
| A. Privacy: 1-5, actual figure given | C. Convenience: score 1-5 |
| B. Adequacy: 1-5, as above | D. Other conditions: score 1-5 |

20. Adequacy of Total facilities. Add up the four scores and code as follows:
(Enter this number below 16-20, D, in margin, and circle it.)

- | | | |
|----------|-------|---------------|
| 9. 19-20 | 6. 15 | 3. 11-12 |
| 8. 17-18 | 5. 14 | 2. 9-10 |
| 7. 16 | 4. 13 | 1. 8 or lower |

21. Stud. folder. After getting the questionnaire, look over a few folders.

If, in your opin., any rating is clearly out of line, correct it. Then add up total score and record as follows:

- | | | | |
|---------------|----------|----------|---------------|
| 9. 36 or more | 7. 30-32 | 5. 27 | 3. 22-24 |
| 8. 33-35 | 6. 28-29 | 4. 25-26 | 2. 19-21 |
| | | | 1. 18 or less |

22. Score each column on a scale where a check at level "A" is 5, "B" is 4, "C" is 3, "D" is 2, and "E" is 1. Add the three scores and record as below. Use your judgment to correct this based on what you see and hear.
- | | | | |
|------------|------------|------------|--------------------|
| 9. 15 pts. | 7. 13 pts. | 5. 11 pts. | 3. 9 pts. |
| 8. 14 | 6. 12 | 4. 10 | 2. 8 |
| | | | 1. 7 or fewer pts. |
23. This item will be scored in the home office. Simply make sure the information is recorded.
24. Use of tests. Look over the descriptions; if they actually do not indicate clearly the kind of use checked, cross out this use. First get total weighted score as follows:

Give 1 pt. for items D, H if checked
 Give up to 2 pts. for items B, F, G
 Give up to 3 pts. for items A, C, E, I
 Give up to 4 pts. - item J if explained
 clearly and well used.

Note that more points are given as the item indicates more personal use of test scores in ways that benefit the student directly. If other uses are described in item K, judge these relative to the ones above and rate 1, 2, 3, or 4. Having obtained tot. score, code as follows:

9. 23 or more pts.	6. 15-16 pts.	3. 8-10 pts.
8. 20-22 pts.	5. 13-14	2. 5- 7
7. 17-19	4. 11-12	1. 4 or fewer pts.

25. Make a quick survey of the actual information as a check on the ratings and change any that seem out of line. Add up score and code as follows:
- | | | |
|--------------------|---------------|--------------------|
| 9. 47 pts. or more | 6. 34-37 pts. | 3. 22-25 pts. |
| 8. 42-46 | 5. 30-33 | 2. 17-21 |
| 7. 38-41 | 4. 26-29 | 1. 16 pts. or less |

26. Uses of Occup. Infor.: Look over occupational informational file and judge whether part "A" has been checked accurately; is the information actually as available as indicated? Correct if necessary.

For points B-F, and point H, score as follows:

3--very good use of inform. in this respect; clearly above ave.
 2--some use in this respect; about ave.
 1--little use, or just a gesture toward using, not much real value
 0--no use made of infor. in this respect

Finally, for pt. "G", score one pt. for each; or give 2 pts. if 2 or 3 of the occasions are done together; for example, if they have a career day or evening along with a military day or evening.

Add up all pts. A-H, and code as follows:

9. 23 or more pts.	6. 17-18 pts.	3. 11-12 pts.
8. 21-22 pts.	5. 15-16	2. 9-10
7. 19-20	4. 13-14	1. 8 or fewer pts.

27. Placement activities. Add up the score and code as follows:

9. 27 or higher	6. 21-22	3. 15-16
8. 25-26	5. 19-20	2. 13-14
7. 23-24	4. 17-18	1. 12 or lower

28. Give one pt. for each follow up of seniors and/or dropouts, and 1 pt. for each use indicated. Give up to 3 pts. for "G" if evidence indicates real effect on guidance procedures.

9. 15 or more pts. 7. 11-12 pts. 5. 7-8 pts. 3. 3-4 pts. 1. No follow
 8. 13-14 pts. 6. 9-10 4. 5-6 2. 1-2 up; no pts.
29. Group guidance activities. Add up score and code exactly as No. 27
placement activities, two questions back. Note the descriptions; if no
 description ask counselor, in order to be sure the activity is actually
 carried out and seems to have guidance value. Cut back on score if the
 activity appears routine and valueless.
30. Parent contacts. Read descriptions to determine value. For example,
 school visits that do not permit parents to talk to teacher about their
 child would not count. Add up score and code as follows:
9. 19 or higher 7. 16 5. 14 3. 12
 8. 17-18 6. 15 4. 13 2. 10-11 1. 9 or fewer

Rating Form for Individual Counselor Questionnaire

NOTE: Two items that did not get on the questionnaire are "sex" and "marital status." In multi-counselor schools, there will be no way of recording these since we are not working with individual counselor data, but merely with averages for the schools. IN ONE-COUNSELOR SCHOOLS, try to remember to ask the counselor about marital status, and enter these ON THE COUNSELOR questionnaire in the upper left hand corner. Code as follows:

Sex: 1 Male Marital Status: 1. Single
 2 Female 2. Separated or divorced
 3. Married, no children
 4. Married, one child etc., through
 9 married, 6 or more children

- 1-2. Use code sheet (to be given you later) to enter the school (MULTI-counselor schools, no need to code UNLESS THEY ALL went to same school.)
- 3-4. NO CODING EXCEPT IN SINGLE-COUNSELOR SCHOOLS. Use code sheet.
- 5-6. Actual number of years.
7. Counseling exp. Actual number of yrs; except that in those rare instances where over 9 yrs., enter NINE (9).
8. Years in this school. Same as previous item.
9. Other experience. Same as previous item.
10. Prof. organizations. Enter actual number of guidance organizations. DO NOT include P.T.A., M.E.A., and other non-guidance organizations.
11. Professional journals. Enter actual number.
12. Goals of guidance. This will be coded in the home office. Simply make sure there is a statement of some kind.
- 13-19. A. Simply make sure that the percents (a,b,c,) total up to approx. 100%.
 B. Count the actual number of non-guidance funct. listed; enter this number to left of letter "B". (If over 9, enter 9).
20. Code as follows:
1. A, any student 3. C, one class through sch. 5. E, other
 2. B, one grade only 4. D, a portion of each class
- 21 and on. Simply make sure that the percents in each of the 2 categories add up to approx. 100%. We can pick up the numbers directly as entered.
- When all counselors are done, go to TABLE I, and enter all items indicated on that table for each of the counselors, and get total and average. NOTE that not all are true averages. For ex., enter nothing on SEX unless all counselors are of same sex; if so, enter that number. Also, leave the school attended blank unless they ALL took their training at same school.

D-6b & c

Rating Form for Teacher Questionnaire

1-2. Helpfulness of Guidance Program

Score as follows: 0 pt. for ea. "Little or No Help"
1 pt. for ea. "Do Not Know"
2 pts. for ea. "Somewhat Helpful"
3 pts. for ea. "Very Helpful"

Add up all pts. and enter actual score in margin.

3. Enter score from 1 to 9 as checked by teacher.

4-5. Teacher participation in guidance

Score as follows: 0 pts. for ea. "Never"
1 pt. for ea. "Occasionally"
2 pts. for ea. "Frequently"

Add up score and enter in margin.

NEXT, enter these three scores for each teacher in sample onto Table II, add up each column and get ave. Attach table to grp. of tchr. questionnaires.

Rating Form for Student Questionnaire

Many of these items will be entered simply on the student questionnaire; however, for others, we will want the school ave. or other infor. Score each student questionnaire, and then go to Table III and enter the items indicated from each of the student forms.

1. Occupation of wage earner. If the occupation is written in, fit as best you can into one of the categories, A-I. If "other" is entered by stud., try to find out what it is and enter into the best fitting category.

Code as follows:

9. Professional (D)	4. Skilled trade (G)
8. Owner, manager (H) bus.	3. Service occupation (F)
7. Office Work (A)	2. Factory worker (C)
6. Sales (E)	1. Unemployed (I)
5. Farm owner or manager (B)	

2. Education of father. Code as follows:

1. A, did not attend 2. B, some grade sch. etc., to 9. more than 1 deg.

3. Education of mother. Code as no. 2.

4. Income. Code as Number 2 (1 for A, 2 for B, up to 8 for H).

5. Books. Code as before, through 6 for F.

6. Parent preference. Code as follows:

4. A, college 2. D or F, job or married
3. B or C, trade school or milit. 1. E, never let me know

If "other" is checked, inquire and fit into one of the above categories.

7. Friends plans. Code as above, EXCEPT, that E and F were reversed.

Therefore, Code 2 for E, get married, and 1 for F, no plans.

8 and 9. Do not code at this time. We may have a code for you later.

Simply make sure they have listed as specific an occupation as possible.

"Art," for example, could be almost anything. Do they want to go to college, an art school, get a job? Note "nursing" also; does this mean LPN, RN, degree nurse?

10. Code as follows:

5. Counselor or assigned guidance person
4. Some other member of the school staff
3. Parent, uncle, or other presumably knowledgeable adult (priest, minist.)
2. Friend, peer, buddy
1. no one

D-7d & e

11 and 12. Code the same way as number 10.

13 and 14 are not coded. However, if you know there is a guidance worker or counselor and the student is not aware of this, make a note of it and attach to materials turned in.

15. Code: 1. No 2. Makes no difference 3. Yes

16. Code: 1. Counselor assigned 2. Only one counselor 3. Have a choice

17. Code: 1. No 2. Yes

18. Number times counselor seen. Code as follows: (add tot. for all 3 yrs.)

9. 18 times or more	6. 12-13 times	3. 6-7 times
8. 16-17 "	5. 10-11 "	2. 4-5 "
7. 14-15 "	4. 8-9 "	1. 3 times or less

19. A.- Ave. length of interview. (Round to nearest 5 min.)

9. 45 min. or more	6. 30 min.	3. 15 min.
8. 40 "	5. 25 "	2. 10 "
7. 35 "	4. 20 "	1. 5 min. or less

Enter the code number to left of No. 19, labelling it 19A.

19. B. Multiply total number of interviews by ave. length to get TOTAL TIME SPENT WITH COUNSELOR. Code as follows and enter below 19A, labelling

it 19B.: 9. 5 hr. or more	4. 46 min. to 1 hr.
8. 4 hr. to 4 hrs. 59 min.	3. 31 min. to 45 min.
7. 3 hr. to 3 hrs. 59 min.	2. 16 min. to 30 min.
6. 2 hr. to 2 hrs. 59 min.	1. 15 min. or less
5. 1 hr. 1 min. to 1 hr. 59 min.	

20. Note in the scale below how this item is to be scored. This is a scale of increasing "depth" or seriousness of the reason(s) for seeing counselor. Explore the students answer with him as necessary to help you to judge the level of his reasons for seeing counselor. Then write in numbers 1, 2, 3, and/or 4 to indicate depth of reasons. IF YOU SIMPLY CANNOT CLASSIFY, make note of this in turning in materials.

Scale to Use in Determining Depth of Counseling Help Sought and Obtained, Student Questionnaire, Items 20 and 21.

1. Most superficial level - seeking information only

- (1) college or vocational school catalogs
- (2) college or vocational school admission requirements
- (3) college or vocational school application blanks
- (4) college or vocational school scholarship application blanks or financial aid information
- (5) military and/or draft information
- (6) high school graduation requirements (and similar items)

2. Somewhat deeper - fairly routine help

- (1) how to change class schedule
- (2) course registration and course choices for next yr., w/no consid. about career choice or post high school plans
- (3) interpretation of score(s) on test(s) given to the class (e.g. scholastic apt. tests, such as MSAT or ACT, or achvm. tests, such as I.T.E.D., etc.)
- (4) suggestions on getting part time job
- (5) help in finding occupational information of some kind
- (6) help in understanding school rules and regulations (& similar items)

3. Still deeper level

- (1) discussing and planning courses for next year or over several yrs. in light of student's post high school educ. plans and career choice (more than merely scheduling, but not actual career counseling)
- (2) help regarding choice of college or vocational school (may include reference to test results)
- (3) help regarding financing post high school education
- (4) help with study skills or with the problem of doing better work in school
- (5) help about a problem with a teacher or the school generally

4. Deepest level

- (1) seeking actual counseling about his career plans; help in dealing with his anxiety about choices and decisions which he must make about his future (career, including abilities, interests, values, aspirations, goals, self understanding); may include interpreting his tests to help gain self understanding
- (2) seeking help with personal problems, for example, getting along with others, lack of confidence; (feelings of inferiority), shyness; boy-girl relationships; family problems, etc.

Having attached numbers to his reasons, indicating depth, code as follows:

9. 4 and 3 level (maybe 1 and 2 also, but not necessary)

8. 4 and 2 level (maybe 1 also, but NOT 3)

7. 4 level only

6. 3 and 2 level (and maybe 1 also)

5. 3 and 1 level (NOT 2)

4. 3 level only

3. 2 and 1 level

2. 2 level only

1. 1 level only

Enter code in left margin.

21. Classify the level or depth of help received on the scale above (1,2, 3, 4 or more than one of these). Explore his answers to clarify the level of help he received, independently of his reasons for seeing counselor. He may have been helped at a lower or higher level. If he reports no help, mark "1"; Code level of help on the 9-point scale above.
22. Code as checked, 1 to 7. This should be checked even though he reports no visits to the counselor.

23. This should be filled in even if there is no counselor in the school. Count number of items checked, and code as follows:

9. 16 or more

6. 12-13

3. 7

8. 15

5. 10-11

2. 6

7. 14

4. 8-9

1. 5 or less

Enter this in margin as 23, A. Now, for schools that have counselors, count the no. checked with "counselor" after item, and code, using the same scale (above). Enter this as "23, B" just below "23, A".

24. Extra-curricular activities. Count each activity and code as follows:

9. 8 or more

6. 5 activities

3. 2 activities

8. 7 activities

5. 4

2. 1

7. 6

4. 3

1. No activities

25. (Not all students will do this. Lay key along the margin next to their marks, and REVERSE indicated ones as instructed. Add and enter the actual total score in margin.

26. Code: 1. No 2. Yes

CODING OF DROPOUT QUESTIONNAIRE

This is CARD NO. 9 - blacken that space.

Student code (3 numbers, top to bottom) and school code (2 numbers).

MAR. STATUS - CODE MARITAL STATUS AS FOLLOWS:

- | | |
|--------------------------|---|
| 1. Single | 5. Married, three (or more) children |
| 2. Married, no children | 8. Single but with one or more children |
| 3. Married, one child | 9. Other |
| 4. Married, two children | |

D1 Occupation of wage earner. If the occupation is written in, fit as best you can into one of the categories, A-I. If "other" is entered by stud., try to find out what it is and enter into the best fitting category.

- Code as follows:
- | | |
|------------------------------|---------------------------|
| 9. Professional (D) | 4. Skilled trade (G) |
| 8. Owner, manager (H) bus. | 3. Service occupation (F) |
| 7. Office Work (A) | 2. Factory worker (C) |
| 6. Sales (E) | 1. Unemployed (I) |
| 5. Farm owner or manager (B) | |

ML, A (Are you the wage-earner?) Code: 1. No; 2. Yes

D2 Education of father. Code as follows:

- | | |
|----------------------------------|---------------------------------------|
| 1. A, Did not attend school | 6. F, Business or trade school |
| 2. B, Some grade school | 7. G, Some college work |
| 3. C, Completed eighth grade | 8. H, Graduated from college |
| 4. D, Some high school | 9. Holds more than one college degree |
| 5. E, Graduated from high school | |

D3 Education of mother. Code same as D2 (father).

D4 Income. Code as follows:

1. A, Always short of the necessities
2. B, Often have difficulty making ends meet
3. C, Sometimes have difficulty getting the necessities
4. D, Have most necessities but almost no luxuries
5. E, Comfortable; have a few luxuries
6. F, Quite well-to-do; have most things we really want
7. G, Well-to-do; have practically all the things we want
8. H, Wealthy

D5 Books. Code as follows:

- | | |
|--|---------------------------------|
| 1. A, Almost none (0-10) | 5. E, About three to four book- |
| 2. B, A few books (11-25) | cases full (251-500) |
| 3. C, About one bookcase full (26-100) | 6. F, A room or library full |
| 4. D, About two bookcases full (101-250) | (over 500) |

D6 Parent Preference. Code as follows:

- | | |
|-------------------------------------|---------------------------|
| 4. A, College | 2. D or F, Job or married |
| 3. B or C, Trade school or military | 1. E, Never let me know |

If "other" is checked, inquire and fit into one of the above categories.

D7 Friends Plans. Code as above, EXCEPT, that E and F were reversed.

Therefore, Code 2 for E, get married; and 1 for F, no plans.

(MSAT to be entered from our records)

D8 Year dropped; code as follows:

- | | | |
|-------------|-------------|---------------------|
| 5. Grade 12 | 3. Grade 10 | |
| 4. " 11 | 2. " 9 | 1. Grade 8 or lower |

D9 Reasons for leaving; Code as follows: (Read this and become familiar with it so that you can fit answers into the best category);

- 01 - Kicked out, forced out, told to leave
- 02 - Failing, academic trouble
- 03 - Reading problem; couldn't read well enough, etc.
- 04 - No interest; disliked school
- 05 - Could not get desired subjects or courses
- 06 - Conflicts with teachers, or with school rules and regulations
- 07 - Conflicts with peers; couldn't get along with other students, etc.
- 08 - Emotional upset; mental health problem
- 09 - Conflicts with parents; parents forced him out; or this trouble led to quitting
- 10 - Pregnancy, or marriage (implied forced by pregnancy)
- 11 - Financial - had to go to work to support self and/or others
- 12 - Health reasons; accident or illness
- 13 - Entered the service (no other reason given)
- 14 - Other reasons not covered by above
- 15 - No reason given
- 16 - Multiple reasons; cannot assign it chiefly to one.

D10 Plans for this year. Code as follows:

- 7. Go to college
- 6. Go to a trade or vocational school
- 5. Go to another school, basically non-vocational (Bible school)
- 4. Get a job (or work on the farm)
- 3. Enter service
- 2. Get married (girls)
- 1. Other

FIELD AND LEVEL DISCREPANCY will be put in from items 11 and 12 after they have been categorized.

D13 Code as follows:

- 5. Counselor or assigned guidance person
- 4. Some other member of the school staff
- 3. Parent, uncle, or other presumably knowledgeable adult (priest, minister, etc.)
- 2. Friend, peer, buddy
- 1. No one

D14 Same as above

D15 Same as above

D16 - 17 Consider both questions; if the answer to both is "NO", code "1"; If the answer to EITHER ONE is "yes", Code "2".

D18 Code: No - "1", Yes - "2" (LEAVE BLANK IF ANSWERS TO 16-17 are both NO)

D19, A-U Code as follows:

- 0 = "NO" (leave blank)
- 1 = someone else in school (janitor, etc.)
- 2 = "yes" (helped by teacher, coach, etc.)
- 3 = "yes" (helped by administration; principal, etc.)
- 4 = "yes" (helped by specialist: sch. psychol., soc. worker, nurse)
- 5 = "yes" (helped by counselor)

D19-1 Score is no. of "YES" answers on items A,L,M,N, (max. score 4)

D19-2 Score is no. "YES" answers on items B,C,E,O,Q (max. 5)

D19-3 Score is no. "YES" answers on items D,F,G,I,J,P,R,S (max. 8)

D19-4 Score is no. "YES" answers on items H,K,T (max. 3)

D-11f

D19-TOT Total number of "YES" answers; score is sum of 1,2,3,4.
NOTE: THE ABOVE does not account for answer "U" other kinds of help.
If something is given here, fit it as best you can into level 1,2,3,4.
These levels are essentially from the most superficial to deepest help,
as described in student questionnaire.

D20,A Did anyone try to help? Code: NO-1; YES-2

D20,B Who tried to help? Code: 1. Someone other than sch. prof. staff
(janitor, military visitor, etc.)
2. Teacher
3. Administrator (principal, superint.)
4. Specialist, such as sch. psychol.,
soc. worker
5. Counselor

D20,C What help did this person give? Code:

- 00 - NO help
- 01 - Scolded, harangued, exhorted student to stay in sch.(reas.not giv.)
- 02 - Tried to get student to stay on by describing how diffic. it is to
get along w/o high sch. diploma, telling of prob. one meets in world
- 03 - Explained student's abilities; tried to get him to realize his
potential and the need for high school completion
- 04 - Explained or arranged night school, summer school, or other ways
of getting high school work completed
- 05 - Gave information about careers or occupations
- 06 - Gave information on military obligations
- 07 - Helped student learn about other kinds of schooling he might get
- 08 - Helped student get work
- 09 - Gave personal help or counseling about personal problems
- 10 - Contacted parents, helped them to understand the problem
- 11 - Arranged for student to see someone who was helpful (psychologist,
doctor, social worker, etc.)
- 12 - Other reasons (NOTE: PERHAPS SOME FILES should be looked at to
see if other cogent kinds of help are given, to add to the coded
ones.)

CODING OF HIGH SCHOOL GRADUATE QUESTIONNAIRE

This is CARD NO. 8 - blacken that space.

Student code (3 numbers, top to bottom) and school code (2 numbers).

MAR. STATUS - CODE MARITAL STATUS AS FOLLOWS:

- | | |
|--------------------------|---------------------------------------|
| 1. Single | 5. Married, three (or more) children |
| 2. Married, no children | 8. Single but with one or more child. |
| 3. Married, one child | 9. Other |
| 4. Married, two children | |

G1 Occupation of wage earner. If the occupation is written in, fit as best
you can into one of the categories, A-I. If "other" is entered by student,
try to find out what it is and enter into the best fitting category.

- Code as follows:
- | | |
|----------------------------|------------------------------|
| 9. Professional (D) | 5. Farm owner or manager (B) |
| 8. Owner, manager (H) bus. | 4. Skilled trade (G) |
| 7. Office work (A) | 3. Service occupation (F) |
| 6. Sales (E) | 2. Factory worker (C) |
| | 1. Unemployed (I) |

G1,A (Are you the wage-earner?) Code: 1. No; 2. Yes

D-12g

G2 Education of father. Code as follows:

- | | |
|----------------------------------|-------------------------------------|
| 1. A, Did not attend school | 6. F, Business or trade school |
| 2. B, Some grade school | 7. G, Some college work |
| 3. C, Completed eighth grade | 8. H, Graduated from college |
| 4. D, Some high school | 9. Holds more than one college deg. |
| 5. E, Graduated from high school | |

G3 Education of mother. Code same as above for G2: father.

G4 Income. Code as follows:

1. A, Always short of the necessities
2. B, Often have difficulty making ends meet
3. C, Sometimes have difficulty getting the necessities
4. D, Have most necessities but almost no luxuries
5. E, Comfortable; have a few luxuries
6. F, Quite well-to-do; have most things we really want
7. G, Well-to-do; have practically all the things we want
8. H, Wealthy

G5 Books. Code as follows:

1. A, Almost none (0-10)
2. B, A few books (11-25)
3. C, About one bookcase full (26-100)
4. D, About two bookcases full (101-250)
5. E, About three to four bookcases full (251-500)
6. F, A room or library full (over 500)

G6 Parent Preference. Code as follows:

4. A, College
 3. B or C, Trade school or military
 2. D or F, Job or married
 1. E, Never let me know
- * If "other" is checked, inquire and fit into one of the above categories.

G7 Friends plans. Code as above, EXCEPT, that E and F were reversed. Therefore, Code 2 for E, get married; and 1 for F, no plans.

(MSAT to be entered from our records)

G15-16 Consider both questions; if the answer to both is "NO", code "1".

If the answer to EITHER ONE is "yes", Code "2".

G17 Code: No - "1", Yes - "2" (LEAVE BLANK if answers to 15-16 are both NO)

G18 (LEAVE BLANK IF answers to 15-16 are both NO). Code as follows: (Add total for all 3 yrs.)

- | | | |
|---------------------|----------------|--------------------|
| 9. 18 times or more | 6. 12-13 times | 3. 6-7 times |
| 8. 16-17 times | 5. 10-11 | 2. 4-5 |
| 7. 14-15 | 4. 8-9 | 1. 3 times or less |

G19A (LEAVE BLANK IF 15-16 are NO and ALSO if 17 is NO). Ave. length of interview. (Round to nearest 5 min.)

- | | | | | |
|--------------------|------------|------------|------------|-------------------|
| 9. 45 min. or more | 7. 35 min. | 5. 25 min. | 3. 15 min. | 1. 5 min. or less |
| 8. 40 min. | 6. 30 | 4. 20 | 2. 10 | |

G19B (LEAVE BLANK IF 15-16 are NO or 17 is NO). Multiply tot. No. interv. by ave. length to get TOT. TIME SPENT W/COUNS. Code: enter below 19A, labelling it 19B:

- | | |
|---------------------------|----------------------------------|
| 9. Over 5 hrs. | 5. 1 hr. 1 min. to 1 hr. 59 min. |
| 8. 4 hr. to 5 hr. | 4. 49 min. to 1 hr. |
| 7. 3 hr. to 3 hr. 59 min. | 3. 31 min. to 45 min. |
| 6. 2 hr. to 2 hr. 59 min. | 2. 16 to 30 min. |
| | 1. 15 min. or less |

Appendix E

Frequency Distributions for Selected Variables on which Data were Collected

% Time With Students Called In		% Time Student Referred by Staff		% Time Self- Referred Student	
N = 84		N = 84		N = 84	
Mean = 44.93		Mean = 17.67		Mean = 37.69	
Sd = 18.20		Sd = 10.24		Sd = 17.92	
	f		f		f
90 -	1	70 -	1	83 - 88	1
85 - 89	0			77 - 82	0
80 - 84	2	38 - 40	4	71 - 76	2
75 - 79	1	35 - 37	1	65 - 70	6
70 - 74	4	32 - 34	1	59 - 64	7
65 - 69	9	29 - 31	3	53 - 58	0
55 - 59	1	26 - 28	0	47 - 52	9
50 - 54	18	23 - 25	8	41 - 46	7
45 - 49	8	20 - 22	16	35 - 40	13
40 - 44	7	17 - 19	3	29 - 34	11
35 - 39	8	14 - 16	17	23 - 28	8
30 - 34	2	11 - 13	3	17 - 22	12
25 - 29	2	8 - 10	20	11 - 16	3
20 - 24	8	5 - 7	7	5 - 10	5
15 - 19	5				
10 - 14	3				

MARITAL STATUS

Marital Status	Grads.	Dropouts
	N = 869	N = 151
Single	94.3	76.2
Married, No Children	3.2	6.7
Married, 1 Child	1.9	13.2
Married, 2 Children	.2	1.3
Married, 3 Children	0.0	0.0
Married, 4 Children	0.0	0.0
Single, 1 or more Children	0.0	1.3
Other	.4	1.3
	100 %	100 %

% Time Provides Information	
N = 84	
Mean = 28.25	
Sd = 12.10	
	f
60 - 64	3
55 - 59	0
50 - 54	7
45 - 49	1
40 - 44	6
35 - 39	3
30 - 34	16
25 - 29	12
20 - 29	9
15 - 19	12
10 - 14	4
5 - 9	0
0 - 4	1

% Time Orientation	
N = 84	
Mean = 12.58	
Sd = 5.19	
	f
24 - 25	2
22 - 23	2
20 - 21	11
18 - 19	3
16 - 17	1
14 - 15	13
12 - 13	8
10 - 11	28
8 - 9	3
6 - 7	2
4 - 5	10
2 - 3	1

% Time Career Planning	
N = 84	
Mean = 14.83	
Sd = 6.73	
	f
30 -	2
28 - 29	2
26 - 27	0
24 - 25	6
22 - 23	3
20 - 21	13
18 - 19	2
16 - 17	6
14 - 15	14
12 - 13	4
10 - 11	18
8 - 9	0
6 - 7	2
4 - 5	12

% Time Seeing Violators	
N = 84	
Mean = 7.33	
Sd = 8.39	
	f
70 -	1
65 - 69	0
60 - 64	0
55 - 59	0
50 - 54	0
45 - 49	0
40 - 44	0
35 - 39	0
30 - 34	0
25 - 29	1
20 - 24	2
15 - 19	4
10 - 14	16
5 - 9	37
0 - 4	23

% Time Career Planning	
N = 84	
Mean = 22.52	
Sd = 8.05	
	f
50 -	1
47 - 49	0
44 - 46	0
41 - 43	1
38 - 40	2
35 - 37	1
32 - 34	1
29 - 31	12
26 - 28	6
23 - 25	18
20 - 22	19
17 - 19	4
14 - 16	8
11 - 13	2
8 - 10	7
5 - 7	2

% Time Personal Problems	
N = 84	
Mean = 13.38	
Sd = 8.07	
	f
45 -	1
42 - 44	0
39 - 41	1
36 - 38	0
33 - 35	0
30 - 32	1
27 - 29	3
24 - 26	4
21 - 23	2
18 - 20	8
15 - 17	11
12 - 14	11
9 - 11	22
6 - 8	1
3 - 5	17
0 - 2	2

Hours Other Experience	
N = 84	
Mean = 4.37	
Sd = 2.32	
Years	f
9 or over	8
8	2
7	5
6	7
5	13
4	17
3	14
2	13
1	1
0	4

No. Prof. Organizations	
N = 84	
Mean = 2.17	
Sd = 1.50	
No. Organiz.	f
9	0
8	0
7	0
6	0
5	4
4	15
3	17
2	19
1	13
0	16

No. Prof. Journals	
N = 84	
Mean = 1.62	
Sd = 1.50	
No. Journals	f
9	0
8	0
7	0
6	1
5	1
4	6
3	19
2	18
1	8
0	31

% Time Spent Counseling	
N = 84	
Mean = 53.77	
Sd = 14.91	
Percent	f
80 -	4
75 - 79	4
70 - 74	7
65 - 69	4
60 - 64	14
55 - 59	8
50 - 54	21
45 - 49	3
40 - 44	10
35 - 39	1
30 - 34	2
25 - 29	2
20 - 24	2
15 - 19	1
10 - 14	1

% Time Other Guidance Functions	
N = 84	
Mean = 32.5	
Sd = 11.55	
Percent	f
65 -	1
60 - 64	1
55 - 59	0
50 - 54	6
45 - 49	6
40 - 44	12
35 - 39	13
30 - 34	14
25 - 29	9
20 - 24	14
15 - 19	4
10 - 14	4

% Time Non-Guidance Functions	
N = 84	
Mean = 13.75	
Sd = 13.75	
Percent	f
75 -	1
70 - 74	0
65 - 69	0
60 - 64	1
55 - 59	0
50 - 54	2
45 - 49	1
40 - 44	0
35 - 39	0
30 - 34	4
25 - 29	3
20 - 24	13
15 - 19	7
10 - 14	17
5 - 9	15
1 - 4	10
0	10

No. Actual Non-Guid. Duties on Assigned Guidance Time	
N = 84	
Mean = 2.35	
Sd = 1.74	
Number	f
9 or more	1
8	0
7	1
6	3
5	5
4	4
3	21
2	19
1	21
0	9

Group Guidance Activities	
N = 84	
Median = 19.05	
Sd = 4.17	
Activities	f
27 or higher	4
25 - 26	5
23 - 24	8
21 - 22	10
19 - 20	20
17 - 18	10
15 - 16	14
13 - 14	8
12 or lower	5

Parent Contacts	
N = 84	
Mean = 4.23	
Sd = 2.11	
Contacts	f
19 or higher	2
17 - 18	8
16	4
15	8
14	13
13	9
12	18
10 - 11	20
9 or fewer	2

Guidance done by Teachers--Tchr. View	
N = 84	
Mean = 23.24	
Sd = 3.07	
	f
30 - 31	1
28 - 29	3
26 - 27	10
24 - 25	30
22 - 23	23
20 - 21	8
18 - 19	6
16 - 17	1
14 - 15	0
12 - 13	1
10 - 11	1

Years Teaching Experience	
N = 84	
Mean = 11.45	
Sd = 6.85	
Years	f
34 - 36	1
31 - 33	0
28 - 30	1
25 - 27	2
22 - 24	3
19 - 21	8
16 - 18	4
13 - 15	13
10 - 12	9
7 - 9	19
4 - 6	17
1 - 3	7

Years Counseling Experience	
N = 84	
Mean = 5.05	
Sd = 3.56	
Years	f
22	1
14	1
13	0
12	1
11	1
10	3
9	5
8	3
7	10
6	9
5	13
4	8
3	5
2	9
1	12

Years Experience this School	
N = 84	
Mean = 9.23	
Sd = 6.84	
Years	f
34 - 36	1
31 - 33	0
28 - 30	1
25 - 27	0
22 - 24	3
19 - 21	3
16 - 18	6
13 - 15	9
10 - 12	12
7 - 9	14
4 - 6	15
1 - 3	20

Extent of Testing Program	
N = 84	
Mean = 3.786	
Sd = 1.75	
	f
9	0
8	4
7	1
6	8
5	14
4	18
3	18
2	15
1	5

Use of Tests	
N = 84	
Mean = 16.27	
Sd = 3.76	
	f
23 or more	9
20 - 22	14
17 - 19	17
15 - 16	13
13 - 14	16
11 - 12	6
8 - 10	6
5 - 7	3
4 or fewer	0

Educational- Occupational Information	
N = 84	
Median = 32.30	
Sd = 6.45	
Scale	f
47 points	1
42 - 46	4
38 - 41	16
34 - 37	16
30 - 33	15
26 - 29	21
22 - 25	8
17 - 21	2
16 or less	1

Uses of Occup. Info.	
N = 84	
Median = 12.82	
Sd = 3.92	
	f
23 or more	2
21 - 22	2
19 - 20	3
17 - 18	7
15 - 16	9
13 - 14	22
11 - 12	13
9 - 10	13
8 or fewer	13

Followup Studies	
N = 84	
Median = 4.13	
Sd = 4.05	
	f
15 or more	1
13 - 14	3
11 - 12	3
9 - 10	4
7 - 8	16
5 - 6	10
3 - 4	19
1 - 2	9
No follow-up, 0 points	18

Placement Activities	
N = 84	
Median = 18.32	
Sd = 3.87	
	f
27 or higher	5
25 - 26	3
23 - 24	4
21 - 22	7
19 - 20	21
17 - 18	17
15 - 16	16
13 - 14	8
12 or lower	3

Board of Educ.
Support for Guidance
Program

N = 84	
Mean = 3.33	
Sd = .797	
	f
5	5
4	29
3	40
2	9
1	1

Facilities-Privacy

N = 84	
Mean = 3.24	
Sd = 1.13	
	f
5	11
4	25
3	28
2	13
1	7

Facilities-Other
Conditions

N = 84	
Mean = 3.11	
Sd = .905	
	f
5	6
4	19
3	39
2	18
1	2

Extent Tchrs. Help
Stud. in pers. growth

N = 84	
Mean = 3.22	
Sd = .546	
	f
5	0
4	24
3	55
2	5
1	0

Facilities-Adequacy

N = 84	
Mean = 2.92	
Sd = .954	
	f
5	5
4	19
3	26
2	33
1	1

Facilities-
Convenience

N = 84	
Mean = 3.22	
Sd = .827	
	f
5	4
4	27
3	38
2	14
1	1

Extent of Tchr-Cnslr
Coop. in Guidance

N = 84	
Median = 14.57	
Sd = 2.48	
	f
23 or more	0
20 - 22	3
18 - 19	6
16 - 17	19
14 - 15	29
12 - 13	20
10 - 11	5
7 - 9	2
6 or fewer	0

Completeness of
Student Record

N = 84	
Median = 30.16	
Sd = 4.21	
	f
36 or more	2
33 - 35	13
30 - 32	34
28 - 29	14
27	10
25 - 26	9
22 - 24	1
19 - 21	1
18 or less	0

Use of Student
Records

N = 84	
Mean = 6.45	
Sd = 1.34	
	f
15 points	3
14	16
13	24
12	24
11	9
10	6
9	2
8	0
7 or fewer	0

Local Effort in Mills	
N = 84	
Mean = 38.86	
Sd = 14.19	
	f
75 - 79	4
70 - 74	0
65 - 69	1
60 - 64	1
55 - 59	4
50 - 54	7
45 - 49	7
40 - 44	11
35 - 39	10
30 - 34	20
25 - 29	9
20 - 24	6
15 - 19	3
0	1

Mean AGCT	
N = 84	
Mean = 115.91	
Sd = 13.405	
Score	f
127.5-129.9	1
125.0-127.4	9
122.5-124.9	10
120.0-122.4	13
117.5-119.9	12
115.0-117.4	19
112.5-114.9	5
110.0-112.4	3
107.5-109.9	3
105.0-107.4	2
102.5-104.9	3
100.0-102.4	2
97.5- 99.9	1
95.0- 97.4	0
92.5- 94.9	0
90.0- 92.4	1

Changes in Guidance*	
N = 84	
Median = 27.43	
Sd = 1.07	
Score	f
46 or more	0
41 - 45	1
36 - 40	4
31 - 35	23
26 - 30	22
21 - 25	25
16 - 20	6
11 - 15	3
10 or fewer	0

*See Appendices B
and D for the
question and the
Score Values

Referral Resources	
N = 84	
Median = 13.66	
Sd =	
	f
20 or more	9
18 - 19	15
16 - 17	19
14 - 15	25
12 - 13	14
11	1
10	1
9	0
8 or lower	0

Money for Guidance	
N = 84	
Mean = 3.27	
Sd = .797	
	f
5	5
4	25
3	43
2	10
1	1

Administr., Encour. and Support	
N = 84	
Mean = 3.89	
Sd = .944	
	f
5	24
4	35
3	18
2	6
1	1

Admin. Encouragement of Guidance	
N = 84	
Mean = 3.60	
Sd = .696	
	f
5	7
4	39
3	35
2	3
1	0

Facilities Available
for Pupils

N = 84

Median = 19.37

Sd = 2.92

No. Facilities	f
27 or more	2
25 - 26	2
23 - 24	6
21 - 22	19
19 - 20	23
17 - 18	20
15 - 16	10
13 - 14	1
12 or fewer	1

Community Facilities
Available

N = 84

Mean = 3.03

Sd = 2.91

No. Facilities	f
12 or more	7
11	5
10	7
9	0
8	4
7	2
6	5
5	6
4 or fewer	48

High to Low Priced
Housing, from A to I

N = 84

Mean = 4.46

Sd = 1.78

Score	f
9. A, Suburb., Res.	12
8. B	9
7. C	5
6. D	14
5. E	39
4. F	0
3. G	2
2. H	2
1. I	1

Percent College
Preparatory

N = 84

Mean = 43.37

Sd = 19.52

Percent	f
99 -	1
92 - 98	0
85 - 91	0
78 - 84	2
71 - 77	2
64 - 70	9
57 - 63	6
50 - 56	17
43 - 49	4
36 - 42	15
29 - 35	17
22 - 28	3
15 - 21	1
8 - 14	0
1 - 7	2
0	5

Length of Class Periods	
N = 84	
Median = 53.63	
Sd = 1.92	
Minutes	f
Over 55	15
51 - 55	69
46 - 50	0
41 - 45	0
40 or less	0

Average Class Size	
N = 84	
Median = 22.46	
Sd = 3.07	
Class Size	f
36 or more	0
33 - 35	0
30 - 32	2
27 - 29	5
24 - 26	22
21 - 23	36
18 - 20	17
15 - 17	1
14 or fewer	1

Ability Grouping	
N = 84	
Median = 5.87	
Sd = 11.46	
Percent	f
Over 70%	0
61 - 70%	0
51 - 60%	0
41 - 50%	1
31 - 40%	2
21 - 30%	8
11 - 20%	18
1 - 10%	27
None	28

Total Number of Subjects Offered	
N = 84	
Mean = 46.69	
Sd = 20.34	
No. Subjects	f
95 - 99	2
90 - 94	2
85 - 89	4
80 - 84	1
75 - 79	1
70 - 74	4
65 - 69	1
60 - 64	2
55 - 59	3
50 - 54	6
45 - 49	9
40 - 44	11
35 - 39	9
30 - 34	11
25 - 29	9
20 - 24	7

No. of Special Classes	
N = 84	
Mean = 2.67	
Sd = 1.44	
No. Classes	f
8 or more	0
7	0
6	1
5	3
4	6
3	11
2	19
1	26
No special classes	17

Types of Recognition for Scholastic Achievement	
N = 84	
Mean = 4.39	
Sd = 1.34	
Types	f
8 or more	0
7	0
6	6
5	10
4	25
3	20
2	16
1	7
None	0

Extra-Curricular Activities	
N = 84	
Median = 12.95	
Sd = 3.48	
No. Activities	f
21 or more	1
19 - 20	5
17 - 18	8
15 - 16	19
13 - 14	11
11 - 12	21
9 - 10	10
7 - 8	9
6 or fewer	0

Enrollment Change	
N = 84	
Median = 0.75%	
Sd = 6.18	
Percent	f
Over 30% incr.	0
26 - 30%	0
21 - 25%	0
16 - 20%	0
11 - 15%	7
6 - 10%	11
1 - 5%	23
No Change	22
Decrease	21

Percent Men Teachers	
N = 84	
Median = 58.28	
Sd = 10.04	
Percent	f
Over 85%	4
76 - 85%	18
66 - 75%	27
56 - 65%	31
46 - 55%	3
36 - 45%	1
26 - 35%	0
16 - 25%	0
15 or fewer	0

Percent Teachers Holding Advanced Degrees	
N = 84	
Median = 23.17	
Sd = 16.63	
Percent	f
Over 85%	0
76 - 85%	0
66 - 75%	1
56 - 65%	5
46 - 55%	7
36 - 45%	13
26 - 35%	12
16 - 25%	15
15 or fewer	31

Average Years of Teaching Experience	
N = 84	
Median = 8.88	
Sd = 2.37	
Years	f
18 or more	3
16 - 17	0
14 - 15	8
12 - 13	10
10 - 11	14
8 - 9	21
6 - 7	12
4 - 5	13
Less than 4	3

Average Salary	
N = 84	
Median = 7,043.35	
Sd = 704.67	
Salary	f
Over \$8,000	9
7,401 - 8,000	20
7,001 - 7,400	14
6,651 - 7,000	6
6,451 - 6,650	11
6,101 - 6,450	5
5,701 - 6,100	12
5,201 - 5,700	7
5,200 - or less	0

No. of Days in School Year	
N = 84	
Median = 173.25	
Sd = 1.995	
No. of Days	f
182 or more	2
180 - 181	6
178 - 179	20
177	5
176	6
174 - 175	20
172 - 173	17
170 - 171	8
169 or less	0

Faculty Press for
Intellectualism-
Achievement

N = 84
Mean = 4.09
Sd = .604

Score	f
5.50-5.79	1
5.30-5.49	0
5.10-5.29	2
4.90-5.09	2
4.70-4.89	4
4.50-4.69	17
4.30-4.49	8
4.10-4.29	12
3.90-4.09	10
3.70-3.89	6
3.50-3.69	7
3.30-3.49	4
3.10-3.29	5
2.90-3.09	4
2.70-2.89	2

Faculty Press for
Supportiveness-
Affiliation-
Independence

N = 84
Mean = 5.17
Sd = .783

Score	f
6.30-6.55	5
6.05-6.29	6
5.80-6.04	7
5.55-5.79	12
5.30-5.54	14
5.05-5.29	7
4.80-5.04	12
4.55-4.79	6
4.30-4.54	4
4.05-4.29	5
3.80-4.04	1
3.55-3.79	1
3.30-3.54	2
3.05-3.29	0
2.80-3.04	2

High School Press for
Estheticism-Humanism

N = 84
Mean = 4.48
Sd = .954

Score	f
6.50	0
6.20-6.49	2
5.90-6.19	3
5.60-5.89	7
5.30-5.59	4
5.00-5.29	13
4.70-4.99	9
4.40-4.69	10
4.10-4.39	7
3.80-4.09	8
3.50-3.79	8
3.20-3.49	5
2.90-3.19	3
2.60-2.89	2
2.30-2.59	3

Academic Self
Concept

N = 84
Mean = 18.58
Sd = 1.63

Score	f
22.9-23.4	1
22.3-22.8	0
21.7-22.2	0
21.1-21.6	3
20.5-21.0	7
19.9-20.4	10
19.3-19.8	5
18.7-19.2	13
18.1-18.6	15
17.5-18.0	10
16.9-17.4	7
16.3-16.8	7
15.7-16.2	2
15.1-15.6	1
14.5-15.0	3

Importance of
Academic Success

N = 84
Mean = 12.8
Sd = 1.14

Score	f
16.0-16.9	1
15.5-15.9	1
15.0-15.4	1
14.5-14.9	1
14.0-14.4	0
13.5-13.9	14
13.0-13.4	8
12.5-12.9	14
12.0-12.4	12
11.5-11.9	18
11.0-11.4	8
10.5-10.9	3
10.0-10.4	2
9.5- 9.9	1

Actual Number of
Seniors

N = 84
Mean = 182.39
Median = 101.28
Sd = 187.89

No. Seniors	f
775-824	1
725-774	1
675-724	1
625-674	2
575-624	0
525-574	1
475-524	3
425-474	1
375-424	3
325-374	3
275-324	4
225-274	4
175-224	4
125-174	7
75-124	14
25- 74	35

Faculty Press for
Enthusiasm-
Directiveness

N = 84
Mean = 1.83
Sd = .341

Score	f
2.60	1
2.50-2.59	1
2.40-2.49	3
2.30-2.39	5
2.20-2.29	2
2.10-2.19	8
2.00-2.09	11
1.90-1.99	9
1.80-1.89	10
1.70-1.79	5
1.60-1.69	9
1.50-1.59	3
1.40-1.49	7
1.30-1.39	6
1.20-1.29	3
1.10-1.19	1

Student Press for
Social Conformity

N = 84
Mean = .57
Sd = .228

Score	f
1.30-1.39	1
1.20-1.29	2
1.10-1.19	0
1.00-1.09	1
.90- .99	2
.80- .89	7
.70- .79	7
.60- .69	19
.50- .59	17
.40- .49	10
.30- .39	14
.20- .29	3
.10- .19	1

Faculty Press for
Scientism

N = 84
Mean = 1.53
Sd = .376

Score	f
2.30-2.40	1
2.20-2.29	2
2.10-2.19	1
2.00-2.09	5
1.90-1.99	9
1.80-1.89	5
1.70-1.79	6
1.60-1.69	14
1.50-1.59	8
1.40-1.49	10
1.30-1.39	4
1.20-1.29	4
1.10-1.19	3
1.00-1.09	6
.90- .99	1
.80- .89	3
.70- .79	0
.60- .69	2

Student Press for
Scientism

N = 84
Mean = 1.043
Sd = .474

Score	f
1.94-2.07	2
1.81-1.94	4
1.68-1.81	5
1.55-1.68	4
1.42-1.55	3
1.29-1.42	6
1.15-1.28	9
1.02-1.15	12
.89-1.02	8
.76- .89	5
.63- .76	6
.50- .63	8
.37- .50	6
.24- .37	5
.11- .24	1

Faculty Press for
Vocationalism

N = 84
Mean = 1.20
Sd = .246

Score	f
1.72	0
1.64-1.71	3
1.56-1.63	3
1.48-1.55	6
1.40-1.47	10
1.32-1.39	6
1.24-1.31	13
1.16-1.23	9
1.08-1.15	9
1.00-1.07	9
.92- .99	4
.84- .91	3
.76- .83	7
.68- .75	1
.60- .67	1

Student Press for
Intellectualism-
Competition

N = 84
Mean = 3.538
Sd = .801

Score	f
4.80-5.19	2
4.50-4.79	5
4.20-4.49	13
3.90-4.19	13
3.60-3.89	11
3.30-3.59	12
3.00-3.29	7
2.70-2.99	8
2.40-2.69	5
2.10-2.39	4
1.80-2.09	2
1.50-1.79	1
1.20-1.49	1

Average Yearly Attendance, as Percent of Perfect Attendance	
Percent	No. of Schools
98	2
97	1
96	6
95	12
94	23
93	11
92	13
91	5
90	5
89	4
88	1
87	0
86	1
84 = N	

GI 46 Administrative Satisfaction with Guidance	
Extent Satisf.	No. of Schools
9*	2
8	9
7	33
6	16
5	10
4	7
3	6
2	0
1**	1
84 = N	

* Completely satisfied
** Completely dissatisfied

T - 3 Teacher Satisfaction with Guidance	
Extent Satisf.	No. of Schools
9*	0
8	2
7	26
6	23
5	18
4	9
3	6
2	0
1	0
84 = N	

* See GI 46

Ti - 2 Teacher Score on Ways Guidance Helps Them, By School	
Score	No. of Schools
32 - 37	1
28 - 31	14
24 - 27	22
20 - 23	20
16 - 19	16
12 - 15	6
8 - 11	5
84 = N	

Sa 2 Average Student Satisfaction with Counselor, By School	
Extent of Satisf.	No. of Schools
7*	0
6	5
5	32
4	39
3	7
2	1
1	0
84 = N	

* Fully satisfied
** Totally dissatisfied

Proportion of Top 15% of Classes of 1965 and 1966 Going to College		
Percent to College	No. of Schools	
	1965	1966
96 or more	17	19
91 - 95	11	13
86 - 90	14	13
81 - 85	10	12
76 - 80	8	8
71 - 75	4	10
66 - 70	5	4
61 - 65	5	0
60 or less	10	5
84 = N		

Proportion of Bottom 15% of Classes of 1965 and 1966 Going to College		
Percent to College	No. of Schools	
	1965	1966
36 or more	1	4
31 - 35	1	2
26 - 30	1	3
21 - 25	4	5
16 - 20	7	6
11 - 15	4	6
6 - 10	16	15
1 - 5	13	2
None	37	41
84 = N		

What Individual Is Doing Now

	Category	G9A Seniors 1965 N = 866	DIO Dropouts N = 150	Category	Follow-up on 1966 Seniors N = 855
		Percent	Percent		Percent
1	College	50.00	0.00	College	48.65
2	Trade or Vocational School	11.50	2.70	Trade, Vocational or other School	10.89
3	Other School (Non- Vocational)	.80	.70		
4	Working (Job or Farm)	25.40	48.70	Working and/or Married	31.46
5	Military Service	6.40	17.30	Military Service	7.25
6	Married (Girls Only)	2.30	9.30		
7	Other	3.60	21.30	Unemployed	1.75
		100.00%	100.00%		100.00%

Proportion of Top 15% of
Classes of 1965 and 1966
Going to Vocational School

Percent to Voc. School	No. of Schools	
	1965	1966
36 or more	0	1
31 - 35	3	0
26 - 30	1	0
21 - 25	1	3
16 - 20	4	8
11 - 15	13	8
6 - 10	13	10
1 - 5	17	14
None	32	40
	84 = N	

Proportion of Bottom 15% of
Classes of 1965 and 1966
Going to Vocational School

Percent to Voc. School	No. of Schools	
	1965	1966
71 or more	0	6
61 - 70	0	1
51 - 60	1	2
41 - 50	2	21
31 - 40	6	15
21 - 30	18	19
11 - 20	19	17
1 - 10	19	0
None	19	3
	84 = N	

M.E.T.
Distribution of
Scores on Minn.
English Test

Score	f
71 - 75	1
66 - 70	7
61 - 65	16
56 - 60	41
51 - 55	53
46 - 50	80
41 - 45	104
36 - 40	149
31 - 35	202
26 - 30	171
21 - 25	147
16 - 20	94
11 - 15	8
6 - 10	1
None	24
	N = 1098

I.T.E.D.
Scores

Score	f
51 - 53	38
48 - 50	105
45 - 47	145
42 - 44	124
39 - 41	132
36 - 38	101
33 - 35	88
30 - 32	80
27 - 29	67
24 - 26	52
21 - 23	52
18 - 20	26
15 - 17	27
12 - 14	15
9 - 11	8
6 - 8	1
	N = 1061

VDI - M
Vocational
Maturity

Score	f
48 - 49	5
46 - 47	36
44 - 45	107
42 - 43	173
40 - 41	189
38 - 39	175
36 - 37	147
34 - 35	83
32 - 33	62
30 - 31	32
28 - 29	18
26 - 27	9
24 - 25	5
22 - 23	1
20 - 21	1
18 - 19	1
	N = 1044

IAV 1 - 2 Scores School Means		
Score	Frequency	
	Self Concept IAV - 1	Self Acceptance IAV - 2
197 - 198	3	0
195 - 196	1	0
193 - 194	5	0
191 - 192	7	1
189 - 190	9	2
187 - 188	9	2
185 - 186	14	2
183 - 184	9	2
181 - 182	12	6
179 - 180	6	14
177 - 178	2	6
175 - 176	2	13
173 - 174	0	14
171 - 172	2	10
169 - 170	2	1
167 - 168	0	1
165 - 166	0	2
163 - 164	0	3
161 - 162	1	2
159 - 160	0	3
	N = 84	N = 84

IAV 1 and 2 Individual Students		
Score	IAV - 1	IAV - 2
	Self Concept	Self Acceptance
241 - 250	2	2
231 - 240	6	2
221 - 230	26	8
211 - 220	86	22
201 - 210	144	74
191 - 200	193	146
181 - 190	227	204
171 - 180	167	208
161 - 170	120	202
151 - 160	65	117
141 - 150	36	68
131 - 140	12	28
121 - 130	8	6
111 - 120	1	6
101 - 110	4	3
91 - 100	1	0
71		1
67		1
	1098	1098